

7.

MEDICAL CAUTIONS,

FOR THE CONSIDERATION OF

I N V A L I D S;

THOSE ESPECIALLY WHO RESORT TO

B A T H:

CONTAINING

E S S A Y S

O N

FASHIONABLE DISEASES;

DANGEROUS EFFECTS OF HOT AND CROWDED
ROOMS;

REGIMEN OF DIET, &c.

AN ENQUIRY INTO THE USE OF MEDICINE DURING
A COURSE OF MINERAL WATERS;

AN ESSAY ON QUACKS, QUACK MEDICINES, AND
LADY DOCTORS;

AND AN APPENDIX, CONTAINING A TABLE OF THE
RELATIVE DIGESTIBILITY OF FOODS, WITH
EXPLANATORY OBSERVATIONS.

PUBLISHED FOR THE BENEFIT OF

THE GENERAL HOSPITAL AT BATH.

By JAMES MAKITTRICK ADAIR, M. D.

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And Fellow of the College of Physicians, Edinburgh.

Idonea dicere vitæ.

Nullius addictus jurare in verba magistri.

Hor.. Lib. I. Epist. i.

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M DCC LXXXVI.

MEDICAL CAUTIONS

IN V A E I D

2 7 A Y 2



DEDICATION.

To the GOVERNORS of the GENERAL
HOSPITAL at BATH.

GENTLEMEN,

IT is with peculiar propriety I inscribe the following Effays to you, as the profits which may arise from the sale of the pamphlet will be appropriated to the benefit of the institution over which you preside.

Independent, as I am, of professional reputation or emolument, I can have no other motive for wishing that the work may have an extensive sale, than as it may redound to the information of my fellow-subjects, and to the support of so excellent a charity.

I am,

Gentlemen,

Your most obedient humble Servant,

The AUTHOR.

Bath, Dec. 1785.

N. B. Whilst these Essays were at the press, the inscription inserted in p. xiv. xv, was placed in the most conspicuous part of the Pump-Room of the King's Bath.

The author of this inscription, and of the verses annexed, is a very ingenious, learned, and truly respectable gentleman of this city; who, by these lines, his Monody on the death of the Marquis of Tavistock, his Bath Guide, Election Ball, &c. has given the most incontrovertible proofs of superior excellence, not only in the pathetic, but the humorous stile of poetry:—A rare instance of poetical versatility!

IT may be proper to observe, that this excellent institution incurs an annual expence of one thousand eight hundred pounds, whilst its permanent revenue does not exceed five hundred pounds; and that, before the late collection, the charity had incurred a considerable debt.

PREFACE.

P R E F A C E.

AS I enjoy a decent competency by the favour of the publick, and am now approaching the verge of life, I am of opinion, that I cannot make a more grateful retribution, than by a publication of this kind; as I may thereby make some compensation for the *manifold professional errors* I must necessarily have committed in the course of almost forty years extensive practice.

Independent in my spirit, as I am in my connections, and *totally regardless of consequences*; I have dared to utter some plain, but unpalatable truths, which a more dependent, yet much more worthy man, might, from prudential motives, have chosen to decline. May such ever be, in *this country*, the result of personal, professional, and political independence, *unalloyed* by the influence of interest, prepossession, or prejudice!

It

It may be alledged that I have, in some instances, indulged a spirit of sarcasm; in others, of asperity; which may have a tendency rather to offend, than reform.

With respect to the air of levity with which I have treated some parts of my subjects, especially in my first and last essays, I have adopted the maxim of *Horace*;* and I trust my readers will do me the justice to believe, that I could not possibly intend either offence or insult, when my wish is to conciliate confidence.

I had, moreover, another motive: Scientific, and especially medical study, is in general very *soporific*, unless sometimes enlivened by a *jeu d'esprit*. The late Dr. *Hunter* often roused his drowsy pupils by an amusing anecdote; and *Le Sage* tells us, that a Spanish lady having complained to her physician of want of sleep, "Madam," said the doctor, "you shall read my Spanish translation of *Hippocrates*, and it will in-

* ——— Ridiculum acri

Fortius et melius magnas plerumque secat res.

"fallibly

“fallibly procure you comfortable slumbers,
“provided it has the same effect upon you
“as it always has had upon me.” How
much is the world indebted to those of our
fraternity, who, *for a course of years*, persevere
in nodding over the *narcotic* page, “for the
“good of their country;” conscious as they
must be, that medical reputation and emolu-
ment are generally to be attained by much
more easy and palatable, though not so cre-
ditable, expedients.

The severity of my strictures on some of
my brethren, has been dictated *solely* by an
honest indignation against artifices which
degrade the profession, not only as scholars,
but as gentlemen. In these animadversions,
I am supported by the example of one of
the noblest and most respectable of human
beings, an ingenious, a learned, a liberal,
and an *honest* man.*

In my *Essays on Fashionable Diseases, and
Noxious Air*, I have attempted to weaken, if

* The late Dr. *Gregory*, professor at Edinburgh: his Introductory
Lecture, from which I have made extracts in my fifth Essay.

not counteract, the impressions of strong prejudice, and rooted habit, by simple facts and plain reasoning.

The observations on Regimen, though comprised in a small compass, are, I believe, quite sufficient for the information of the intelligent reader: they are the result of long experience.

In my Essay on the use of Medicine under a course of Mineral Waters, I have candidly, and without reserve, given my opinion on a matter of great importance to such invalids as resort to watering-places; and I flatter myself my admonitions will be deemed seasonable, by those who will venture to exercise their own judgments on a narrative of plain facts.

My Essay on Quackery was written with a view to check the general propensity of all ranks in this kingdom, either to encourage professed quacks, or to quack themselves, their connections and dependents; and this propensity is become the more alarming, as
persons

persons of rank and fortune have set the example.

I think myself peculiarly qualified for this task; as I have, for many years, taken much pains to detect the ignorance and knavery of our most celebrated nostrum-mongers; and to discover the nature and composition of their remedies: and I intreat the reader will peruse what I have advanced, with care, candour, and impartiality.

I have been peculiarly careful to render these essays as intelligible as possible to ordinary readers: but it is very difficult for professional men, who have long been in the habit of thinking, speaking, and writing *technically*, to avoid using terms and modes of reasoning, which may not be clearly understood by persons not of the profession.

I have, as much as possible, avoided learned quotations; not only because I have a sovereign contempt for *even* the semblance of pedantry; but as I flatter myself that this *morceau* will become a very fashionable *powdering*

dering book; infomuch that every fine lady and fine gentleman will consider it as a necessary article of *toilette* furniture; and whilst under the hands of the *friseur*, peruse it with as little study and application, and with *almost* as much amusement and information, as a modern novel, or a new play.

Whatever may be the merit or demerit of these essays; I hope my readers will be of opinion, that a very few hours employed in the perusal of them will not be misapplied; and that the expence incurred by the purchase will be so far laudable, as it may contribute to the support of a most beneficial charity.

N. B. Since the work has been printed off, it occurred to me, that I had not been so explicit on some parts of my subject as might have been expected; I have therefore placed the additional matter in the Appendix, with references to those parts of the work in which they ought to have been inserted. The readers are therefore requested to transfer them thither by their pens.

The

The Appendix also contains a table of foods commonly in use, arranged according to their relative digestibility.

The reader is requested to peruse the Appendix before the Essay on Regimen, as the latter will by that means be better understood. The table of foods, though it may not be very useful in other respects, will at least tend to render the subsequent remarks more intelligible.

Having been led, insensibly, in my remarks on the relative digestibility of foods, into a more scientific and argumentative mode of treating the subject than I at first intended; such of my readers as are averse from the *semblance* of abstruse speculation, may not perhaps be so well satisfied with this part of the work; though, with a little attention, they will, I hope, find it not only intelligible but instructive.

INSCRIPTION IN THE PUMP-ROOM, BATH.

T H E

H O S P I T A L

In this City,

Appropriated solely to BATH CASES,

And open to the Poor and Afflicted

Of every Part of the World,

(Bath only excepted)

Being destitute of a Fund

In any degree adequate

To its Support,

Is most earnestly recommended

To the Patronage and Protection

Of The Humane

And Liberal Part of Mankind.

OH! pause awhile, whoe'er thou art
 That drink'st this healing stream:—
 If e'er Compassion o'er thy heart
 Diffus'd its heavenly beam,

Think on the Wretch, whose distant Lot
 This friendly Aid denies;
 Think how in some poor, lonely Cot
 He unregarded lies!

Hither th' afflicted Stranger bring,
 Relieve his heartfelt Woe,
 And let thy Bounty, like this Spring,
 In genial Currents flow.

So be thy Years from Want, and Pain,
 And pining Sicknefs free,
 And thou from Heav'n that Debt obtain
 The poor Man owes to thee.

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MEDICAL CAUTIONS.

ESSAY I.

On FASHIONABLE DISEASES.

FASHION, like its companion *Luxury*, may be considered as one of those excrescences which are attached to national improvement; and which so far resemble the moss of fruit-trees, and the mistletoe of the oak, as not to be entirely useless; though they may be occasionally injurious.

Whilst one part of a polished nation is assiduously engaged in cultivating the arts and sciences; another part is not less busily employed in the invention and regulation of its fashions.

As societies advance in civilization, the active mind of man, not contented with the means of satisfying our natural wants, is
B anxiously

anxiously employed in creating artificial wants, and the means of their gratification.

When that scourge of mankind Louis the XIV. was induced by vanity and ambition to attempt universal empire, his subjects were, *pour l'honneur du grand Monarque*, not less solicitous to extend the language and fashions of that frivolous nation; and even sturdy John Bull, whilst his armies and navies triumphed over those of France, deigned to submit to the influence of her fashions.

By one of those revolutions, however, which are not unfrequent in the affairs of men; whilst France has of late presumed to dictate to our Ministers, she has condescended to adopt our fashions: manifest proofs of which frequently occurred to me in that country, and even in the apartments of the first lady of that kingdom: How have we benefited by the exchange?

The empire of fashion has now become universal; it is not confined to the decoration of our persons, or the embellishment of our houses and equipages; but extends to our politics, morals, religion, and even
in

in some degree to our sciences. Men and women of fashion are supereminently distinguished from those of *no fashion*, or *whom no-body knows*.

I do not, however, *entirely* approve of those apparent discriminations of national character, merely because they do not seem to answer the purpose for which they were established; for whilst people of no rank and slender means presume to intrude on the province of their superiors, by *fashionably* ruining themselves, their families, and connections; the pale of distinction is thrown down by toad-eaters, swindlers, and gamblers, who, by keeping *the best company*, necessarily exalt themselves to the high prerogative of being *people of fashion*.

Should any of my fashionable readers express their surprise at meeting with a dissertation on fashion in a medical essay, my reply is ready; that as medicine, as well as some other arts, is become subject to the empire of fashion, there can be no impropriety in considering by what means this has been effected.

Fashion has long influenced the great and opulent in the choice of their physicians, surgeons, apothecaries, and midwives; but it is not so obvious how it has influenced them also in the *choice* of their diseases. This I shall endeavour to explain.

Patients are generally prompted by curiosity to enquire of their medical guide, what is their disease? But an explicit answer to the question is not always either convenient or practicable; because the doctor is sometimes ignorant of it himself; instead therefore of entering on a learned disquisition on the subject, or candidly confessing his ignorance, which would not be always consistent with good policy; he gratifies his patient by a general term, which may, or may not, be expressive of the nature of the disease.

If both patient and doctor are people of fashion, this circumstance is alone sufficient to render the term fashionable; for as people of fashion claim an exclusive privilege of having always something to complain of; so the mutual communication of their ailments is often a topic of conversation; the imagination frequently suggests a
similarity

similarity of disease, though none such really exists; and thus the term becomes soon completely fashionable.

In the latter end of the last and beginning of this century, spleen, vapours, or hyp, was the fashionable disease.

The Princess, afterwards Queen Anne, often chagrined and insulted in her former station, and perplexed and harrassed in the latter, was frequently subject to depression of spirits, for which, after the courtly physicians had given it a name, they proceeded to prescribe Rawleigh's confection and pearl cordial. This circumstance was sufficient to transfer both the disease and the remedy to all who had the least pretensions to rank with persons of fashion. In process of time, however, these fashionable and palatable shop drams, became by repetition too weak, and many of the patients, tired of the expence and inefficacy of the remedy, found a more ready and more powerful substitute in closet cordials and plain Nantz.

Upwards of thirty years ago, a treatise on nervous diseases was published by my quondam learned and ingenious preceptor Dr.

WHYT, professor of physick, at Edinburgh. Before the publication of this book, people of fashion had not the least idea that they had nerves; but a fashionable apothecary of my acquaintance, having cast his eye over the book, and having been often puzzled by the enquiries of his patients concerning the nature and causes of their complaints, derived from thence a hint, by which he readily cut the gordian knot—"Madam, you are nervous;" the solution was quite satisfactory, the term became fashionable, and spleen, vapours, and hyp, were forgotten.

Some years after this, Dr. COE wrote a treatise on biliary concretions, which turned the tide of fashion; nerves and nervous diseases were kicked out of doors, and *bilious* became the fashionable term. How long it will stand its ground cannot be determined.

Names or terms, when improperly employed in matters of science, necessarily create confusion and error; but had this fashionable term been productive of no untoward *practical* consequences, I should have considered any attempt to combat the
idea

idea as unnecessary and absurd. But I have observed so many injurious effects from the adoption of this idea, that I think it my duty to be at some pains to point out the danger of it.

From a well-grounded opinion that Bath waters are very beneficial in colics produced by gall-stones, and other cases of defective bile, a very considerable proportion of the patients who resort to this place, come with a strong prepossession that their complaints are *bilious*; insomuch that instead of my patients giving me a detail of their symptoms, by which I may judge of the nature of the disease; the answer generally is, "*Doctor, I am bilious*;" and on enquiry, I find that they have generally been in the habit of taking medicines to carry off the bile.

To point out the dangerous consequences of indulging, and acting, under this idea, I shall, as briefly as possible, relate two cases, out of many others which have occurred to me.

Some years ago a lady, daughter of an eminent physician, and wife to a gentleman

more respectable from his personal character, than *even* by his near relation to a noble family, consulted me on her case.

A late *fashionable* physician, who had declined practice, spent some time at this gentleman's country seat. As he had been the family physician, the lady consulted him, as a friend, concerning a complaint of her stomach, and he prescribed her a course of purging salts, under the idea that the case was bilious.

Some weeks after I was consulted; and found that she had almost daily used these salts, but instead of being relieved was much reduced, with a total loss of appetite, and extreme oppression after meals; from which very distressful symptom, she was in some measure relieved, either by discharging her stomach, or a repetition of her purge.

I, in vain, attempted to dissuade my patient from this destructive practice, and therefore advised that some other physician might be consulted. Some difficulty having arisen concerning the choice, copies of her case were sent to three physicians in London. The physician who had been strongly recommended

commended by the friend of the family as his successor, desired the patient might go to town, and put herself under his care; but this being, on account of her weakness, deemed impracticable, he was prevailed on to visit her. As we did not agree in our opinion of the case, I resigned the patient totally to his direction: Purging medicines, and large quantities of the acid of lemons, were ordered; and her physician left her with a declaration that he expected to find her out of danger in the course of two days, when he should visit her again: But on the morning of that day she died, after having laboured for twenty-four hours under violent convulsions.

Here a trivial complaint, which might have been relieved by a few stomach medicines, and a course of Bath waters, became fatal from injudicious management in the beginning; for I was well assured that the disease was incurable before the lady was visited by the last physician; who erred only in his favourable prognostic respecting the issue of a case which was beyond the power of medicine: though it is probable the lady's death
was

was precipitated by the adoption of his patron's plan.

A single lady, daughter of a most worthy and respectable friend of mine, had been for many months in the habit of taking purges, with an expectation of carrying off bile; in-somuch that her stomach and bowels, having become, by repetition, insensible to the impression of weaker purges, was at length obliged to have recourse to gamboge pills, by the direction of a very eminent physician in London. Her health, considerably impaired by this practice, was farther injured by the death of an only sister, and she came to Bath last spring to consult me.

This lady had been so accustomed to frequent purging, that she experienced the most distressful oppression and sense of fullness at the pit of the stomach, when she omitted the use of her pills for a day or two: But I having pointed out the danger of pursuing this plan, she desisted, and from the use of a few warm medicines, assisted by the Bath water, gradually increased to four of the largest glasses of the King's Bath pump. This lady left Bath much amended; and by
a letter

a letter received from her lately, I understand that she has not taken any purgative since, excepting a little tincture of rhubarb once only, when indisposed by colic.

Had this lady continued the use of these violent purgatives, or indeed of any, she would probably have died under complaints similar to those mentioned in the preceding case; or have been destroyed by an inflammation of the bowels, in consequence of their insuperable insensibility to the impression of necessary means.

The Bath water and other remedies rendered the farther use of purges unnecessary, by strengthening the stomach and bowels, and enabling them to perform their offices regularly and steadily.

The cases now related afford an irrefragable proof of the dangerous consequences of indulging in the habitual use of drugs, especially those of the purgative kind; and this often upon the most trivial occasions; and I am entirely convinced that Anderson's pills, and James's Analeptic pills (now the fashionable remedy,) have been more destructive to his Majesty's subjects than even the havock of war.

Before I proceed to assign my reasons for believing that the idea of bilious diseases being frequent, is founded in error, it will be proper to consider the true meaning of the term *bilious*. *Bile* is a fluid of a brownish yellow colour, of a pungent bitter taste, separated by the liver, and discharged into the bowels a few inches below the inferior orifice of the stomach; partly from the liver, and partly from the gall bladder, which is a kind of repository for the bile, where it undergoes some necessary changes.

It is supposed to be of great importance in converting our foods into proper nourishment. The share that the bile has in this process can only be accurately explained in terms which would not be intelligible to any but medical readers; and indeed the following arguments, which will be urged against the supposition of bile being a frequent cause of disease, must necessarily be less cogent, because some of the most forcible reasons must be omitted, as not intelligible to ordinary readers.

Bile may be said to be either too abundant and too sharp, or the reverse; that is,
too

too scanty or not sufficiently pungent; and one or other of those conditions must take place in any disease, which is commonly called *bilious*; though I think very improperly, in every case where it is deficient. In hot climates, and even during the sultry weather of our summers, the bile may be too sharp; and therefore offensive to the stomach and bowels: But persons most subject to those complaints, are chiefly the strong, athletic, and laborious; who are much exposed to the heat of the sun, such as soldiers, seamen, and day-labourers; but even in those persons, I know from experience, that the bile discharged is more frequently an effect than a cause of disease; for though the natural pungency of the bile may be exasperated by excess of heat in fevers; yet as soon as the fever ceases, the bile, so far from being either too abundant or too acrid, is generally deficient in both respects, and continues to be so until the patient recovers his health and strength. That sallowness and duskiness of complexion, therefore, which we remark in the countenances of persons recovering from intermittent fevers and

and agues, and also in chronic diseases, and which is often termed *bilious*; is owing to a cause with which bile is very little, if at all, connected, any otherwise than in consequence of its deficiency, which, in the language of common sense, cannot be called *bilious*.

Persons of relaxed, delicate, and irritable habits (and such generally are the persons of rank and fortune who seem to have monopolized the term) are so far from being affected by excess of the bile, that the very reverse is the case.

The bile is often more deficient in quantity and pungency than the reverse; and this is frequently the result of that indolence of life and relaxation of habit, most frequently to be met with in the wealthy; and is often accompanied by a train of nervous symptoms; though there is no doubt but persons in the inferior ranks of life, who are reduced indigence, improper diet, or disease, may also labour under this defect of the bile. But without insisting on the impropriety of applying the term *bilious* under these circumstances, it will be sufficient to observe, that
in

in such cases all the remedies directed, are such as are intended to increase the quantity and sharpness of this humour: Hence the late celebrated Dr. BOERHAAVE prescribed ox's gall and other bitters as substitutes the bile.

Jaundice, or a bilious tinge of the skin, is considered as a sufficient proof of an excess of bile; and many patients, especially the ladies, are very much in the habit of consulting their friends and their doctors, concerning the colour of their eyes; and by the aid of a depraved imagination, often detect bile as a cause where it does not exist. Thus, when a lady, having spent many hours at a Route, almost suffocated by the hot and tainted air of a small crowded room, is thrown into a temporary fever, and awakes unrefreshed and distressed; perhaps not in a very good humour, from a bad run at cards the preceding night; upon consulting her glass, finds her complexion not so clear as the preceding day; but unwilling to attribute it to the real cause, finds a ready resource in the bile.

Jaundice,

Jaundice, however, is rarely the consequence of excess of bile, but of its deficiency, and only shews that it has by a variety of causes, some of them not well understood, been diverted from its natural course. But here, the means of relief are such as may be beneficial in restoring it to its usual channel, and increase its quantity and sharpness; and not to discharge it as abundant and offensive: therefore, this does not deserve, strictly speaking, the name of a bilious disease, any more than a dropsy necessarily implies an excess of the thinner parts of the blood.

A bilious tinge of the skin is not unfrequently the accidental effect of nervous or spasmodic colics, owing to the natural passages of the bile being so blocked up by a temporary constriction, that it is diffused over the surface. This I have more than once observed in patients exquisitely nervous, and in whom there was not the least reason to suspect either abundance of bile, or gall-stones. In these cases, the skin and whites of the eyes have lost the yellow tinge, when the spasm being removed, the bile returned into its natural course. A dose of
camphor

camphor, or opium effected a cure; whilst a purge, given in this state of the organs, would have increased the yellowness.

But there are many diseases accompanied with a fallowness of complexion, often mistaken for a jaundiced tinge; and this is sometimes the case in persons who labour under a complication of nervous and hypochondriacal symptoms, not unfrequently complicated with ill-formed gout: such persons, under the idea of being bilious, are frequently too busy with purgatives, for the absurd purpose of carrying off a cause which does not exist; and thereby exasperate all their complaints.

Gall-stones, as they are commonly called, are formed, by the bile contained in the gall-bladder becoming gradually so congealed as to acquire the consistence of yellow wax. This is not so frequent a disease as is generally imagined; but it is easily distinguished from what are commonly, but falsely, called *bilious* cases, from the exquisite and intolerable pains at the pit of the stomach; whilst the gall-stones block up the passage from the gall-bladder. But this terrible evil is not

C

always

always accompanied with a bilious tinge of the skin, which is indeed often accidental, and unconnected with any fault of the bile.

Even diseases of the liver itself, the organ which prepares this humour, do not, strictly speaking, deserve the name of *bilious*; for yellowness of the skin, or a discharge of bile, are only accidental circumstances; and some of the most inveterate diseases of this organ take place without either.

A bitter taste of the mouth, a brownish list on the tongue, a sickness, and sense of oppression at the pit of the stomach, are supposed to be undoubted proofs of offensive bile in the stomach; especially if bile be discharged by vomiting: but if we consider the unnatural medley of foods which are swallowed by the rich and luxurious, we may readily account for these symptoms, without attributing them to the bile; which, had it really existed in the stomach, would rather have prevented, by its assimilating quality, those unnatural ferments, than have promoted them; and indeed this is supposed to be its peculiar office, after the food is discharged into the bowels.

With

With respect to the supposed unequivocal proof of an offensive state of the bile, from its being discharged by vomit, this circumstance merits a distinct and more minute consideration.

Though some physicians have alledged that bile is always present in the stomach, and that it is indispensibly necessary to the digestion of the food; yet the majority have doubted, and even denied the fact; and some experiments made on brutes, with an express intention to ascertain the nature of digestion, seem to contradict it. If bile ever arrives at the stomach, it must be by a perverted and retrograde motion of the bowels, and contrary to gravity; which, in the simplicity of the operations of nature, cannot readily be admitted; for if the wise author of our being had intended that the bile should be deposited in the stomach, it might easily have been conveyed directly thither, as, it is said, was found to be the case on the dissection of a man who had been remarkable for a most voracious appetite, owing, as it was supposed, to its being conveyed thither directly by a duct. Some of my patients have asked me

how bile should be discharged from the stomach; if it was not deposited there. The answer is easy. The sensation of sickness, if it be severe and permanent, promotes a regurgitation of bile into the stomach, by inverting the peristaltic motion of that bowel or intestine which is connected with the stomach: and hence it sometimes happens, that when the stomach is empty, pure bile is discharged by the first effort; but this is no evidence of its being the offensive cause of the vomiting, but an accidental effect; neither is a copious discharge of bile any evidence of its being in a diseased state.

The most healthy person, on going to sea, when he becomes sick, discharges, after various efforts, a great quantity of bile, and this for days successively: but shall we from thence infer that his bile is abundant or acrid? A man in high health receives a blow on his head, by which his brain is injured; he throws up green bile: are we to suppose that the bile is in fault? Persons subject to nervous head-achs often discharge bile; but the effect is accidental, and is in no respect connected with a fault of this humour.

mour. Persons, the tone of whose stomachs is much impaired by intemperance, and other causes, after a severe fit of heartburn, discharge the contents of the stomach so extremely sour, as even to corrode the throat. After a few efforts, the matter thrown up is green: this also is attributed to bile; though in truth, if this bile had been present in the stomach, it would have neutralized and corrected this sharp acid; as we know that ox gall mixed with acids has this effect.

To conclude, the idea of bile being a predominant cause of disease, is a gross and vulgar error; and in its consequences a very injurious one; and I can, from long and extensive experience, aver, that those evils which have been attributed to its excess, have generally resulted from its deficiency; and that the idea of carrying off this most useful and salutary humour, when it is already too scanty, has been often productive of the most dangerous and fatal consequences.

N. B. In the Greek language, the same term is used to express bile and anger; hence the word *choleric* is applied to persons of a violent, irascible, and resentful disposition.

Were the British Fair, especially the *Fashionable*, (whose polished education has a manifest tendency to regulate, if not almost annihilate, all the tumultuous passions) apprized of this circumstance, they could not possibly conceive, that any of their bodily or mental evils originated from, or were connected with an excess of *gall* or *bile*; and instead of continuing to adopt it as a *fashionable disease*, they would resign it to the nymphs of St. Giles's and Billingsgate.

ESSAY II.

*The DANGEROUS EFFECTS of HOT and
CROUDED ROOMS.*

CHAP. I.

FIRE is an element, the nature of which, notwithstanding the numerous experiments and painful researches of philosophers and chymists, is but imperfectly understood. It is the most universal principle, and the most powerful agent, in nature, as it pervades all bodies, and resides in a certain degree in
the

the coldest: heat and flame being only effects of its activity, and cold of its quiescent state, in those bodies.

When united with the principle of inflammability, which resides in many bodies, those bodies, when fire acts upon them, burst out into flame; and this flame is supported by the external air: which is also supposed to enter copiously into the composition of those bodies during their state of combustion.

Though all bodies in nature are not susceptible of flame, yet all are of heat, in various degrees, generally in proportion to their density.

The effects of heat on animal bodies are in proportion to its degree, and perhaps of some other circumstances not yet well ascertained. In a moderate degree, it creates an agreeable sensation in the parts with which it comes in contact, quickens the circulation of the blood, and increases the sensibility of the body. In a degree equal to, or above the heat of the body, it first excites and increases the powers of the circulation; but ultimately weakens and depresses them:

Hence

Hence it is that bakers, blacksmiths, manufacturers of glass, &c. are oppressed, and eventually much weakened, by the heat of their furnaces, &c.; and we know that excess of heat *alone* produces dangerous and often fatal fevers; and that, when the impressions of cold succeed those of heat, a variety of diseases are produced, according to the degrees of each, and other circumstances.

This subject will be considered more fully in the next chapter.

CHAP. II.

EFFECTS *of* NOXIOUS AIR.

THIS term, when applied to air, implies, that it is injurious to animal life. The mass of air which surrounds this globe to a considerable height, and which is called the atmosphere, seems to be a compound of pure air blended with a very large proportion of exhalations from animals, vegetables, minerals, and metals; and therefore must be more or less impure in proportion

portion to the nature and degree of these exhalations.

As we are constantly and necessarily receiving a column of this air into our lungs, for the support of life, it is of considerable importance that it should be as free from impurity as possible, (for impure it always is in some degree) because, when highly contaminated, it is fatal; as is evident from the effects of burning charcoal, experiments with the air-pump, &c.

The effects of impure air on the body are various, according to the degree of its impurity. The person who remains for some time in foul air becomes uneasy and languid, with head-ach, difficulty of breathing, sense of oppression about the heart, cold sweat, fainting, &c.

These effects shew that the lungs are unable to admit or discharge the air with their usual freedom; that the powers of the heart and circulation are weakened; the energy of the nervous system depressed and almost suspended; and that life will soon be totally extinguished.

It may now be proper to enquire what are the chief causes of these effects; that

we may avoid, or in some measure counteract them.

1st. *Heat* in excess is the cause of much inconvenience and danger, as has been remarked in the preceding chapter, even when it is not combined with any other noxious qualities. In no city or quarter of the kingdom are these evils so frequently or severely felt as at Bath; surrounded as it is by hills, the incumbent atmosphere is rendered more warm and moist by the steams from the hot baths, and the smoke from the numerous fires. This atmosphere is more stagnant, or less frequently changed here than in cities situated on plains; and when changed, it is but partially so; the colder and heavier air rushing into and through the streets, in eddies, especially from the west and northern points; hence it is a general complaint that Bath is more windy than any other place.

This city being much resorted to, most of the houses are occupied by strangers; so that constant fires in almost every apartment, render the houses exceedingly hot; as is evident from the heat of the party walls, which

is

is sometimes almost intolerable in bed-chambers, especially if the beds are placed near those walls.

The public rooms, though lofty and spacious, are nevertheless rendered very hot by the numerous fires, and the great number of candles; but especially by the croud of people who resort to them: but the evil is much increased by the frequency of private routes, where small rooms are filled by a croud of persons.*

Hence it is that strangers almost generally complain of having caught cold on their coming to Bath; and invalids are not only thereby interrupted in the use of the waters, but their healths are much impaired;

* It has been to me matter of great surprise, that in this city, where the public rooms are so commodious, people of fashion should countenance private meetings or routes, not only to the injury of the public institutions, but manifestly, of their own healths. Some wicked wags have occasionally related such circumstances of the ludicrous and laughable distresses which have occurred at those meetings, as would have afforded our late Aristophanes ample materials for a farce: It is my duty to attend *solely* to the very *serious* consequences which result from such meetings.

In London, the practice of giving routes is more warrantable, not only because there are few, if any, public card-rooms; and the private apartments are much more *spacious* and airy than our dining-rooms and parlours here; not to mention the bed-chambers, closets, and *cupboards*, into which the company are crammed.

and

and coughs, rheumatisms, and fevers, are superadded to their other maladies.

These evils are not obviated by the use of chairs or other carriages. The common chairs, soaked by the rains and night-dews to which they are perpetually exposed, instead of affording a proper defence against the outward air, contribute rather to increase the evil; nor are gentlemen's carriages much less inconvenient; for besides their being exposed in open sheds, where not only the leather but the lining must unavoidably contract and retain damps, persons who pass from a hot room, through cold and long passages, into the open air, and from thence to their carriages, are subject to be instantaneously chilled by the sudden transition from suffocating heat to piercing cold.

2dly. *Tainted or impure Air.*

To the philosophical experiments and researches of the very ingenious Dr. PRIESTLEY, employed in discovering the nature and properties of factitious airs, we are much indebted for a more accurate knowledge of the qualities,

qualities, and relative degrees of purity of the atmospheric air.

This air, of which it is said not above one-sixth is really pure, is a very heterogeneous mass, the greatest proportion of which is really inimical to animal life.

Beside this general source of contamination, the breath and perspiration of the human body taint the air we breathe so much, that it is generally supposed that each person destroys the vivifying principle of a gallon of air in a minute; and hence the necessity of frequently ventilating and renewing the air of our apartments, especially if small and crowded.

Of the dangerous and even fatal effects of stagnant and tainted air, many instances are recorded. Not to mention the memorable instance of the *black hole* at Calcutta, others occurred some years ago at the assizes at Oxford, and lately in the assembly-room at Edinburgh; in both which instances the air became so foul, as to threaten the immediate destruction of every person present. But foul air does not only weaken the springs of life,

life, but generates the most malignant and contagious diseases.†

Hence it is, that in the close and damp cells of our county jails, the air is so noxious as to engender a malignant fever, to such a degree, that for one convict that is executed, three die of the jail distemper. It is for this reason also, that unless hospitals are very judiciously constructed, and constantly ventilated, a much smaller proportion of the patients recover, than of those who occupy separate apartments in private houses.

But independently of these and many other well-vouched facts, a simple experiment will afford a positive proof of what is now alledged.

The most neat and delicate person, after having passed the night in his bed-chamber, does not, when he awakes, discover any offensive smell in his room: but if he quits it for a few minutes, and returns to it, after having been in the open air, and before fresh air has been admitted, he will quickly discern an essential difference.

† A philosophical critic may alledge that I here confound the ordinary contamination of the air with specific contagion; but in a treatise of this kind, accurate discrimination is not necessary.

The same happens in public and crowded rooms; but as the offensive impression may be partly attributed to the blended effluvia from the fires, lights, and perfumes, (the latter of which by the bye are not very salutary) the experiment would not be so decisive.

If these evils arise from stagnant air in apartments frequented by the opulent, nice, and elegant, who have the means and disposition to promote neatness and cleanliness; how much more injurious must stagnant air be in the hovels of the indigent, who are destitute of all the conveniences, and many of the necessaries of life!

I shall endeavour to explain, as briefly and intelligibly as possible, the reason why the effluvia from human bodies are so injurious; as such explanation will point out the means of lessening, though perhaps not totally obviating the evil.

Many of the organs which compose our wonderfully complicated frame are employed in discharging particles of our food, or of the constituent parts of our bodies, which by the various exercise of its functions

tions are become usefefs; and, if retained, would neceffarily become very noxious, and the caufes of many difeafes. Many of thofe difcharges, efpecially from the furface of the body, and from the lungs, are, even in the moft healthy and delicate perfons, in a ftate not very remote from putrefaction; but in perfons labouring under difeafe, they are of a ftill more noxious nature; and hence two hints are fuggelted, viz. that perfons in health are not benefited by fleeping in the fame bed with invalids; and that it is peculiarly neceffary to have the apartments of the fick well aired and ventilated; and their apparel, efpecially their linen, frequently changed.

It is fuppofed, and I believe juftly, that more of the offensive particles of our bodies are fwapt off by the air received into the lungs, than from the whole furface of the body befides; and this is the reafon why the air we breathe is fo foon contaminated, and rendered unfit for the fupport of life; and this in proportion to the air being lefs pure previously to its being infpired; becaufe, thus tainted, it is fooner faturated with the noxious matter it takes up in the air cells
of

of the lungs, and therefore carries off a smaller proportion in a given time.

There is another source of tainted or impure air, (besides many others which I shall not enumerate) viz. burning fuel of every kind. That charcoal taints the air, has long been known to medical men; but it has not been so generally suspected, that candles, lamps, wood, turf, and coal fires, foul the air of the apartments in which they are burned. An eminent and very ingenious physician of this city † has, by applying Dr. PRIESTLEY'S test, found that the fumes of burning wood taint the air more than those of coal, and charcoal more than either; and that the smoke of tallow candles is more injurious than that of wax or spermaceti.

That gentleman discovered also that the human breath tainted the air more considerably in the afternoon, than in the morning; but that the effects of different kinds of paint, and of flowers, on the test, were less apparent than might have been expected, considering how noxious both are to the human body.

† Dr. FALCONER.

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Fire

Fire has, in general, been deemed a purifier of air, and under certain circumstances it may be so in a relative degree: by dissipating the moisture of cold and damp places, and, by rarefying the column of air within its influence, favour the admission of colder and denser air.

When Hippocrates was consulted concerning the best means of preventing the propagation of a contagious disease (perhaps the plague) which infested a part of Greece; he advised that large fires might be made in a narrow pass formed by adjoining mountains, for the purpose of purifying the air. But it is to be doubted how far the expedient would avail; as the rarefaction produced by the heat, would as readily favour a torrent of infected air from one quarter, as of purer air from the other.

Burning bodies certainly absorb a large quantity of the surrounding atmosphere, and it is to be supposed the purest, as it is a more suitable pabulum; but it is equally certain, that they also throw off a very large portion of inflammable air, by which the atmospheric air is tainted: So that fires and all other
burning

burning bodies injure the air, not only by consuming the purer part, but by throwing off foul air.

From what has been said, it appears that a variety of circumstances conspire, even in our private habitations and apartments, to weaken, and almost insensibly undermine the springs of life; but in public meetings and private routs, the evils arising from large fires, numerous lights, and crowded rooms, are proportionably increased.

A circumstance which occurred about two years ago first induced me to offer my opinion on this subject.

A young lively woman, who came hither to put herself under my care, gave a rout, and insisted I should be of the party. The room was small, and the company very numerous. We had not been long seated at the card tables, before a young man, my partner, after having undergone various changes of countenance, fell into a swoon. The doors were thrown open to afford him fresh air, and my patient, who was a delicate invalid, was much injured by the sudden exposure to the current of cold air. How

the rest of the company were affected, I had not an opportunity of knowing; but my own feelings and sufferings for many hours after I retired, convinced me of the dangerous consequences of such meetings.

On declaring, a few days after, to one of my brethren, a man of humour, my resolution of writing a bitter Philippic against routs; he archly replied, "Let them alone, " Doctor, how otherwise could *twenty-six* " physicians subsist in this place?"

I proceed now to point out the means by which these evils are to be obviated.

It may be laid down as a self-evident proposition, that as the extremes of heat and cold are very injurious to the human frame, especially if they rapidly succeed each other; so it is incumbent on those who wish to preserve health, to endeavour to establish such an equality in the temperature of the air they breathe, as to avoid an excess of either.

The public rooms of this city, though very spacious and lofty, are, however, so heated by fires, lights, and a croud of company, as to be very injurious to those who frequent them. On the ball nights one door

door of the ball room is generally left open, and the chimneys afford a vent, in some degree, to the foul and rarefied air. But this is not sufficient, as is manifest to the feelings of every person on passing into them from the outer rooms. Those who frequent the card rooms have not even the benefit of an open door, unless when persons pass and repass, when the cold air rushing in by starts and intervals, is more hurtful than beneficial.

I would therefore propose that the casements of all public rooms, and indeed of private houses, shall be so constructed, as that the upper division shall slide down, and that a certain portion of them, according as the room is more or less crowded, be always kept open. By thus promoting a free and constant circulation of air in every apartment, whether occupied or not, the internal and external air becomes nearly of equal temperature; the foul air which is generated in close unoccupied chambers, and which adheres to the walls and furniture, will be carried off before it is accumulated, and the usual practice of airing rooms, by opening
the

the windows, and warming them with fires, will be less, if at all necessary.

This opening of the windows being, even in private houses, much above the level of our bodies, obviates the objection of its being injurious, by exposing us to a current of air.

But the truth is, that unless the wind sets strongly from the quarter opposite to the open windows, the rarefied and foul air, rushing through those apertures, counteracts and resists the column of cold air. This is evident from a simple experiment. Apply a burning candle to the upper crevice of the door of a heated room, the flame will tend outwards; if to the bottom crevice, inwards; a proof that whilst the heated and foul air rushes out at the upper crevice, the colder and purer air enters below.— Hence the impropriety of double doors, linings, listings, and sand-bags, all which, by preventing some degree of ventilation, contribute to the evil which I wish to obviate.

A thermometer placed in public rooms, and the sitting rooms of private houses, would regulate the degree of heat, which in
the

the winter ought rarely to exceed 58 or 60 degrees of Farenheit's thermometer; whereas when this test is applied in heated and crouded rooms, it is found to exceed it considerably.

A lady of this city, who consulted me, had the casements of her apartments altered in the manner I have suggested; and has been benefited by the experiment.

It is obvious, that by these expedients for regulating the heat of the rooms, we should not only breathe a purer air, but, in a great measure, avoid the dangerous consequences of rushing from heated rooms into cold air; the difference being, in frosty weather, often between 50 and 60 degrees.

All persons, but especially invalids, when they go into a close room from the open air, ought not to approach the fire immediately; but if cold, bring themselves gradually to the temperature of the air of the room, which ought rarely to exceed 60. If from inspecting the thermometer, which ought to hang at some distance from the fire, it is found to be considerably higher, the fire ought to be lessened, or more of the upper
ashes

fashes opened. By such precaution, they will not only avoid the debilitating effects of a sudden transition from extreme cold to great heat, but be less affected by the foul air thrown off by the burning fuel. For this reason I am, from what I remarked in traversing the continents of Europe and America, convinced, that stoves are preferable to open grates, not only because they diffuse the heat more equally; but carry off the inflammable air extricated by the fire.

I shall close this chapter with some remarks on our sleeping apartments.

If we allow only eight hours in the twenty-four to sleep; though many persons, especially invalids, spend many more hours in their bed-chambers, we shall find that during more than one-third of our time, we breathe the same stagnant impure air, highly impregnated with noxious effluvia.

Those who have not experienced the benefits resulting from the expedients I shall propose, are not conscious of the evils which proceed from sleeping in confined and small bed-chambers. But from the instances of the fatal effects of air contaminated in a
high

high degree, already-mentioned, there is the strongest presumption that in a lower degree the effects, though more insidious, must nevertheless be very injurious.

It may be farther remarked as a collateral proof, that we feel ourselves lively and alert in a pure air; and Dr. PRIESTLEY tells us, that his feelings and breathing were remarkably pleasant when he breathed that kind of factitious air which he calls deplogificated, and which is much purer than the common atmospheric air. The inference is obvious.

I would therefore, not only from long personal experience, but the information of others to whom I have recommended it, advise, that not only invalids, but persons in health, admit a free circulation of air in their bed-chambers, by various ways, and in different degrees, according to the season of the year and other circumstances.

During the warm close weather of the summer and autumnal months; the chamber door may be left open for a few nights; afterwards a part of the sash may be left open; but the current of air intercepted by the shutter: and as the person becomes more habituated

bituated to free air, the shutter also may be left open, and the current prevented by dropping a window curtain before it.

In the colder months, a window in an adjoining apartment may be left open, as also the door of communication; opening or closing the shutter, according as the wind does or does not blow directly from that quarter. Chimney boards, as very great impediments to a free circulation, ought never to be admitted in any apartment.

Thick curtains closely drawn around the bed are very injurious; because they not only confine the effluvia thrown off from our bodies whilst in bed, but intercept the current of pure air.

It may be objected, that by the admission of cold air, persons, especially invalids, would be apt to *catch cold*, as it is commonly called; but so far from this being the case, I aver, that diseases from this cause generally proceed from persons being exposed to cold after being previously much heated: and so far is excessive warmth from being conducive to the cure of colds, and their many dangerous consequences, that they are always exasperated

rated by hot close apartments, and hot regimen; and therefore the best means of preventing diseases from cold, is to avoid the contrary extreme.

Those persons who have a window open in the bed-chamber or an adjoining apartment, need not be under any apprehension of suffering by a current of air being immediately directed upon them whilst in bed; because, if the upper sash be open, the current will be considerably above the level of the bed; but if the lower sash be open, it will be prudent to draw so much of the bed curtain as to prevent the wind from blowing upon the person in bed. But the danger of catching cold from such current is more apparent than real, for if the head and body are properly covered, there is no hazard; and one advantage of thus admitting air is, that persons who are in the habit of lying very warm, will by this expedient find themselves much less oppressed, and heated by a load of bed-clothes; as the lungs, like the funnel of a stove, discharge the heated and foul air by means of the cool air admitted by every inspiration.

It

It may also be alledged, that from the experiments of Dr. INGENHOUSZ, night air is noxious; as vegetables in a growing state throw off in the shade, a great quantity of noxious air. But allowing the result of these experiments to be such as the Doctor has related, it may indeed be an objection to keeping flowers in our apartments, but none to the night air in large cities, where no vegetation goes on.

It will be expected, that instead of arguing from general principles, I should adduce instances of the safety and utility of this innovation; and the expectation is reasonable: but it would swell this essay too much to enter into numerous and minute details; I shall however mention a few circumstances, which will, I hope, carry conviction along with them.

It is an incontrovertible truth that, in general, such persons as are precluded, by necessity, from the indulgence of warm and close rooms; and are deprived even of the benefit of comfortable firing, are more hardy, and enjoy firmer health, than the opulent; though no habits of living can afford an
entire

entire exemption from disease. Hence it is that though indigence, and pinching want, in many of the lower rank of every society, is a grievous relative evil; yet affluence and luxurious indulgence expose us to distresses of a different kind, and there is nearly a compensation throughout, the balance being rather in favour of the middle rank in every society.

Of the safety of the practice I recommend, my own family affords a manifest proof; nor have I ever heard that any of my friends or patients who have made the experiment, have had any reason to repent it, but the reverse.

About sixteen years ago I attended the late Sir John Aftley, whilst he resided on his estate at Everley in Wiltshire. This old gentleman, then above 80, lay, during the severest part of the winter, in a room without fire, and a bed without curtains, and every morning plunged into the cold bath; and had he not, from a spirit of obstinacy, neglected and mismanaged himself when labouring under a complaint not dangerous in its nature, he might have survived several years longer.

That

That the admission of cold air into bed-chambers is of use in preserving health, cannot be doubted by any who have read the preceding part of this chapter; for if foul air weakens and destroys the springs of life, pure air must necessarily support and invigorate them.

If at any time I neglect to admit air into my bed-chamber, before I go to bed, my night is spent uncomfortably, I am hot and feverish, and I awake distressed by head-ach, and other disagreeable feelings. This may be partly attributed to habit; but it affords an irrefragable proof, that cool and pure air is more friendly to the human system, than our being immersed for many hours in the hot and putrescent vapours exhaled from our own bodies.

Impure air is peculiarly inimical to the nervous system: it relaxes and enfeebles the general habit, and increases the irritability of the body.

On conversing with a sensible and ingenious gentleman* on this subject, he informed

* Mr. LUCAS, of the York Hotel at Bath. — If an University education, very respectable family connections, urbanity of manners and integrity of heart, constitute a gentleman, no man has a higher claim

me that he had for many years laboured under a complication of nervous symptoms, for which he had obtained no relief from medicine. He at length determined to try the effects of ventilating his chamber in the manner I have mentioned; and has been benefited thereby beyond expectation.

On my communicating these remarks to an eminent physician here, he favoured me with the following letter:

"I do not wish to have my name mentioned in the detail of my case; it will be sufficient to say, that having for many years been occasionally subject to palpitations of the heart, shortness of breathing, great anxiety and depression of spirits, universal tremor, and other symptoms of the kind, usually called nervous; after trial of many medicines of the antispasmodic kind, I found nothing so effectual as a strict attention to preserving a due temperature of body during the night, at which time the above symptoms were most apt to recur.

claim to that character than my old friend Mr. Lucas. — Many years ago I knew the brother of an English Peer in the same rank of life, and with similar qualifications.

" In

“ In order to preserve this temperature, I
 “ found it necessary to use only a moderately
 “ thin quilt in the summer, with an addition
 “ of a moderately warm blanket in the win-
 “ ter, and no fire in the room; one window
 “ of which was kept open all night in the
 “ summer, and the whole of the day in cold
 “ weather. This regimen produced sound
 “ and refreshing sleep, and almost an entire
 “ exemption from many troublesome symp-
 “ toms of a similar kind that frequently came
 “ on in the day time.”

Other instances have occurred to me of a
 similar kind; but not so decisive of the
 efficacy of this practice.

Many persons who labour under chronic
 diseases, are distressed by an irregular fever,
 which, from the impure air they breathe for
 many hours in bed, is most troublesome in
 the night. I know, from experience, that
 it is much abated, and sometimes entirely
 removed, by the admission of cool air; and
 the slumbers of the invalid become less in-
 terrupted, and much more refreshing. To
 such as labour under catarrhal coughs, which
 often terminate in consumption, to such also

as labour under this disease in an advanced state, and to the asthmatic, this mode has been singularly beneficial.

To conclude; I can venture to affirm, that, by a cautious use of the expedients I have recommended, diseases may often be prevented, and invalids frequently relieved.

ESSAY III.

REGIMEN.

THIS term, in medical language, signifies the regulation of various circumstances respecting those modes of life, by which health may be preserved or restored.

The objects of regimen, are residence or habitation,—diet,—exercise, and rest, which include sleeping and waking,—clothing, and the passions of the mind.

These have been by physicians denominated *non-naturals*; because, when abused, they are contrary to nature, and have a direct tendency to produce or increase disease;

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but

but when properly regulated, they become friendly to our nature, and contribute not only to the preservation of health, but to the cure of diseases.*

Many voluminous treatises have been written on this subject: I believe, however, that in the following chapters, I have not omitted any circumstances which may contribute to the information, either of invalids, or of such persons as are disposed to preserve the invaluable blessing of health.

Regimen may be divided into three branches; viz.

1st. That which respects the preservation of health.

2^{dly}. That which is adapted to the removal of occasional diseases.—And

3^{dly}. The regimen which may have a tendency to cure or alleviate inveterate or hereditary diseases.

In these three points of view I shall consider Diet: My remarks on this, and other

* *Medicine* has sometimes been ranked among the non-naturals, and indeed I have often found it to be sufficiently *unnatural*: But the good old *non-natural* practice of bleeding, purging, and swilling gallons of diet drink, every spring and fall, is now *out of fashion*:—It went out with the worthy race of Lady Bountiful's, together with cowslip wine, and plague water.

parts of regimen, will be chiefly the result of my own experience; which, from assiduous attention, has been very extensive.

It has been very generally acknowledged, that, in many instances, regimen may be more effectual than even medicine itself: it is at least true, that medicine owes much of its success to a corresponding regimen.

It must however be confessed, that, so far as respects the regimen necessary for the preservation of health, much must depend on the constitution and habits of life; and that no absolute rule can be laid down.

Respecting the regimen to be observed in the cure of occasional diseases; that must depend on the nature of the disease, and must be left to the discretion of the attendant physician, who only can ascertain it.

With regard to the third head, where the disease, from its inveteracy, has become, as it were, a part of the constitution, I shall offer a few remarks; though even here much must depend on constitutional circumstances.

One of the most decisive proofs of the efficacy of regimen is recorded by the celebrated LEWIS CORNARO, a noble Venetian;

whose constitution having suffered, almost irreparably, before he arrived at his 46th year; did, by dint of regimen, surmount a complication of disease, and he lived almost a century.

Longevity, however, ought not to be a primary incentive to the observance of regimen, but rather an inducement, whilst we do live, to endeavour to possess a sound mind in a healthy body; a blessing, the want of which cannot be compensated by celebrity, rank, or fortune.

CHAP. I.

DIET.

UNDER this head are included foods, drinks, and what may be called *condiments*, viz. pickles, sauces and confections.

Until our bodies attain their utmost growth, an additional quantity of nourishment is necessary for this purpose; beside what is required for supplying the constant waste of the solid and fluid parts of our bodies

bodies, incurred not only by the exercise of the constitutional functions; but by the various degrees of labour we undergo.

Food is generally divided into animal and vegetable; and from the nature of the human frame, compared with that of other animals, it is evident that man was destined to use a mixture of both.

It would neither be very intelligible nor satisfactory to the unmedical reader, to enter into a scientific disquisition on the nature of digestion. It may just be observed, that from the vessels or strainers of the mouth, throat, stomach, liver, and bowels, there is constantly poured out a variety of humours which soften, dissolve, and intimately blend the various materials of our foods, drinks, &c. both in the stomach and bowels, and with the assistance of heat equal to 96 degrees, reduces them to an uniform liquid mass called *chyle*, which being conveyed to the heart, and there mixed with the blood, is distributed for the nourishment of every minute fibre of the body.

Many speculations have been advanced to explain the wonderful process of diges-

tion, none of which are quite satisfactory: It is not however improbable, that it in some degree resembles that fermentation by which wines, beers, cyder, &c. are prepared.

SECT. I. *Preventive Diet.*

This ought certainly to be adapted to the constitution and habits of life.

Persons who labour hard, will require large supplies of food, to compensate for the constant dissipation and waste of the solid and fluid parts of the body; whilst the indolent, and such persons as are full and gross, should be much more sparing. The quantity taken at each meal ought to be regulated by our feelings; taking care always to desist from eating before there is any sense of oppression: because that disagreeable sensation will undoubtedly increase soon after the dissolution of the aliment; when from the heat of the stomach, the air contained in the food recovers its elasticity, and increases the bulk of the whole contents, during the digestive fermentation.

Gluttony

Gluttony is so fordid and ungentlemanly a vice, that it would be a gross affront to suppose any man above the degree of a porter to be capable of it: and yet I suspect, that there are few persons in tolerable health, who do not more or less exceed at dinner. One reason of this is, the fashionable irregularity of our meals; the interval between breakfast and dinner being so great, that we are induced, by a keen appetite, to swallow the first part of the meal without its being duly masticated and blended with the saliva in the mouth; a circumstance which adds greatly to the labour of the stomach in the work of digestion.

Another circumstance which induces us to exceed in quantity, is variety of dishes; and as people of fortune are frequently epicures in some degree, they can rarely resist the temptation of tasting most of the dishes at table; such especially as are rendered palatable by high sauces; and thereby insensibly exceed a due mean.

To avoid this temptation to excess, therefore, it were better if we were contented with one dish of meat, plainly dressed,
“ and

“and threw our fevers and gouts to the
“poor.”

It has been a question much agitated, whether supper is or is not a wholesome meal: but its being so depends upon circumstances. The laborious ploughman indulges, with impunity, in a plentiful supper; but persons of fortune, unless they use more exercise than they generally do, experience inconvenience from a heavy supper. This inconvenience does not proceed from supper being less wholesome than dinner; but because none but the laborious can bear two full meals of animal food in one day.

Celsus and *Pliny* tell us, that the antient Romans made a very slight repast at dinner, and ate a full but early meal at supper; and as persons of fashion in almost every nation but ours dine early, supper is to them an inoffensive meal.

The truth is, we do not divide our meals properly; and imperfect and oppressive digestion is a necessary consequence.

Quality of our Foods.

Persons frequently ask their Physician whether this or that species of food is or is
not

not wholesome. The only answer that can be made to the question is, that of the articles which are usually employed as foods, none can be deemed absolutely unwholesome; though, from peculiarity of constitution, depending chiefly on the state of the nerves of the stomach, certain foods agree better with some persons than others; and though it may, in general, be asserted, that we are injured more by excess in the quantity, than the depraved quality of our foods; yet every person whose stomach has been repeatedly distressed by particular foods ought certainly to avoid them.

As animal food nourishes more than vegetable, persons who are full of blood, or of a gross habit, ought to use a larger proportion of vegetables; and thereby prevent fevers and other diseases consequent of this state of the body. The choice of foods of either kind is of very little consequence, provided they sit easily on the stomach; for that is the criterion by which both quantity and quality are to be regulated: sedentary and studious persons ought to be sparing in the use of animal foods, and avoid such vegetables

ables as are very flatulent: turnips are perhaps preferable on this account; and as the sedentary approach nearly to the state of invalids; what I remark hereafter on that head merits their attention.

Drinks.

It will not, I think, admit of a doubt, that water is the only drink necessary for a person in firm health, especially in the earlier periods of life; and that fermented and spirituous liquors, of which luxury has introduced a great variety, ought to be appropriated solely to the comfort of invalids, and the invigoration of old age. It may here be proper to observe, that all drink beyond the gratification of thirst is superfluous and improper; and as thirst is most urgent, when the body is heated; so care should be taken that cold drinks, especially water, be used with great caution, when the body is in that state; as the most dangerous consequences may ensue.

To the credit of the present age, hard drinking is rarely practised by persons of liberal education; and therefore it would be unnecessary

unnecessary to caution my readers against so injurious a practice; or to point out the destructive consequences of it. Dram-drinking is a fordid and fatal habit.

It may be expected that I should take some notice of the qualities and effects of fermented and spirituous liquors.

Malt liquors, if strong and new, and our made wines, in general, contain more sugar and other nutritive particles (for all vegetables, susceptible of fermentation, contain a saccharine juice) than cyder, perry, and foreign wines, some sweet wines excepted; and are therefore more oppressive to the stomach, and less exhilarating. In opulent families, it is the custom to drink stale and hard small beer, which sometimes produces dangerous colicks; and a very near and dear relation of mine was destroyed by it: porter is the most wholesome of all our fermented drinks.

Wines are of various kinds, sweet and austere, strong and weak. Some years ago it was a fashion for medical men to reprobate all our made wines, but unjustly; for, if well fermented, they are not less healthful
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than the foreign, perhaps more so; as the latter have often a large proportion of brandy, and other more noxious ingredients. Such persons as are in the daily habit of using wine, must regulate their choice by its effects on the stomach and head.

It is a singular circumstance, that rum, brandy, gin, and arrack, though they are the products of fermentation, powerfully resist it in the stomach; and therefore when diluted by water, in the proportion of ten or twelve of the latter to one of the former, will be preferable to fermented liquors, for such invalids as have acidities in the stomach. If spirituous liquors are not of a good age, they are very injurious.

Though the intoxicating quality of all fermented liquors depends chiefly on the proportion of spirit they contain; yet distilled spirits, from their more immediate and more powerful action on the nerves of the stomach, and through them on the heart and brain, are much more injurious when used to excess.

It has been a question whether rum or brandy are most wholesome; some preferring one and some the other, and each appealing to experiments:

experiments: but the dispute is futile; for the difference cannot be essential, if the distillation has been properly conducted, and the liquors are of a proper age.

Modern luxury having ransacked every quarter of the globe for its gratification; among other articles, *tea* and *coffee* are now in general use: the former even amongst the lower ranks of the community. Much has been said of the injurious effects of *tea* especially. I am, from long and attentive observation, inclined to believe, that the opulent are least injured by the use of either, whilst *tea* (independent of its expence) is much more injurious to the poor. The reason seems to be, that, as the chief part of the food of the laborious and indigent is vegetable, which affords a much smaller proportion of nourishment than animal food, and is much less permanent and invigorating, especially to the stomach; so *tea* has, from its nature, a peculiar power, by its action on the nerves of the stomach, to enfeeble, not only that organ, but the whole body: hence we find that tremor and other nervous symptoms are often brought on by an intemperate use

use of tea and coffee: this effect may be in some degree obviated, if not entirely prevented, by adding a considerable proportion of sugar and cream, which, being more oily, is preferable to milk: this observation relates only to persons in vigorous health, and not to sedentary people, who in some measure may be ranked with invalids: but on the contrary, those persons who indulge in a plentiful use of animal food and strong drink, are so far from being incommoded either by coffee or tea, that they often qualify and are qualified by these beverages; in so much as they partly counteract the stimulating effects of the foods and drinks. If however, as I remarked before, these or any other articles of food disagree, they ought to be given up.

I shall take notice of some other articles of food under another head; and shall conclude with reminding the reader, that these remarks refer only to persons in good health: and notwithstanding an observation of an eminent ancient physician, that even a little excess may now and then be warrantable,* I think it would be more prudent to pursue

* *Sanus homo nullis debet obligare se legibus.* CELSUS.

a plan of regular temperance than hazard the consequences of occasional excess, which, independent of immediate effects, often degenerates into habit.

SECT. II. *Diet of Invalids.*

There are many persons who may be said to be neither sick nor well; owing either to delicacy of constitution, or the effects of former diseases; and are therefore under a necessity of attending to regimen. It is peculiarly incumbent on such invalids to divide their meals, and eat frequently, but in small quantities; and of solid rather than liquid foods, unless they are exceedingly weak; when small quantities of thin chocolate, tapioca, or broths, may be taken every two or three hours: tea and coffee ought to be avoided, or sparingly used, with a considerable quantity of cream, and with bread and butter.

I have already hinted that fermentation may have some share in the process of digestion; at least there is great reason to believe that it takes place when digestion is imperfect. Thus many persons throw up the
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contents of the stomach as sour as verjuice, which is probably owing to the fermentation being carried too far, partly from the proportion of vegetable food being too great, and partly from a defect in the humours, which prevents them from checking this fermentation, which being continued in the intestines, and not corrected by the bile, which is too sparing and weak, the chyle must be depraved and unfit for wholesome nourishment. Another fault of digestion happens, when the contents of the stomach are converted into a glairy slimy mass, owing to the use of slippery gelatinous insipid foods, whether animal or vegetable; which, from the weakness of the stomach and its humours, cannot be duly concocted. Here there seems to be a defect of fermentation; though even in this case the contents of the stomach sometimes become sour. A third fault of digestion is attributed to a putrefactive fermentation carried too far; for some physicians have been of opinion, that in healthy digestion, it does take place in some degree. This species of fermentation may be owing to too much animal food, or the
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the use of putrid meat, or to some putrid leaven in the stomach and bowels; and is diametrically opposite to the two former.

The late very eminent Sir Edward Barry found, that by feeding a strong man with game for some time, without any vegetable food, he brought on a putridity of the humours of the stomach; which, if farther continued, might have generated a putrid fever. This is so far from being an objection to the use of such foods in the state of the stomach I allude to, that it is the strongest recommendation; for, as I have already observed, there are two extremes of depraved digestion, the acefcent and putrefactive; so as the former takes place in almost all invalids, foods with a putrescent tendency have the same disposition to correct that acid, as acids have in correcting the humours in a putrid fever. Our neighbours the French eat their animal foods so near to a putrid state as to have the *fumet*; but the putrescent tendency is corrected by their vegetables and small subacid wines; and by this judicious mixture they are less subject to chronic diseases, all of

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which

which originate from, or are connected with, depraved digestion.

Invalids, who have sour stomachs, ought therefore to use a greater proportion of animal, and very little vegetable food; the older animals, as beef and mutton, rather than the younger, as veal, lamb, and chicken, or some kinds of fish: game of all kinds is preferable, especially if kept as long as the meat is sweet; and notwithstanding the opinion of a learned physician,* all these foods ought to be rather roasted than boiled, and thoroughly done, as the fire certainly divides the mucilaginous particles which form a part of all animals; but abound very much in the younger. Hence it is that the meat of younger animals often disagrees with invalids; and hence the impropriety of feeding the sick and weak with jellies, which are often so indigestible even by persons in health, as to disagree exceedingly: of which Dr. STACK, an ingenious and able physician

* Dr. Cadogan, in his Essay on Regimen in chronic diseases.

It is with diffidence and regret I oppose my opinions to those of this learned Physician; but how well soever his pamphlet may have been received by unmedical readers; it is, I believe, generally the opinion of his brethren, that no publication of this kind contains more false facts and erroneous opinions.

of this place, communicated to me a very remarkable instance. Beef or mutton-tea are much preferable as articles of nourishment for weak invalids.

From what has been said, it is manifest why the foods I have recommended are preferable so long as the stomach remains weak; for in health all foods which agree are indifferent.

I must therefore dissent from the doctor's opinion with respect to the preference he gives to insipid and half-raw meats; and his peremptory disapprobation of salted meats and pickles. When the stomach is in a vigorous state, neither of these are necessary; but in a relaxed languid state of the stomach, when the natural warmth is deficient, and the remains of the preceding meal give a mucilaginous or aciscent tendency to the next, I cannot conceive why the doctor should object so strenuously to the use of a small proportion of ham, tongue, &c.; for I have, from repeated experience, found them to digest with the utmost ease, and restore the appetite of invalids, who either were not able to retain the insipid foods on

the stomach; or, if they did, found them, even in the smallest quantities, exceedingly disgusting and oppressive. Many invalids can make a very good meal on cold meats, especially when moderately salted, but cannot bear the smell of warm meats at dinner; which is often so very offensive as totally to destroy all appetite, especially when they have fasted for many hours. Such persons, under an apprehension that they shall spoil their dinner, are unwilling to take any kind of food in the interval between breakfast and dinner; whereas long fasting is very injurious; and if they do not make a tolerable dinner, the body is not sufficiently nourished; if they do, oppression and indigestion are the consequences.

There does not appear to be any better ground for the doctor's objection against pickles or spiceries, than against bitter, aromatic, and cordial medicines, given with an express intention to restore the tone of the stomach and bowels. The small proportion of vinegar which some pickles contain, is amply counteracted by the putrescent tendency of animal food. The aromatic spices,
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which form a part of fauces, are perhaps not so eligible as the cayenne pepper; which, as it contains very little of the essential oil, and that very pungent and diffusible, is less permanently heating than the aromatic; and indeed I have, in manifold instances, experienced very good effects from it, not only as a fauce, but as a medicine, in weakneses of the stomach and bowels, and in all chronic diseases connected with it. Horse-radish, mustard, onions, garlick, &c. belong to the class of pickles; and though they may, in high and robust health, be deemed unnecessary, and certainly are so; yet, in a languid state of the stomach, they coincide in efficacy with those remedies which are usually prescribed in such cases. The truth is, that the doctor, an eleve of the Boerhaavian school, retains the exploded idea of acrimony of the humours being the source of manifold diseases; whereas it is, in general, solely an effect of weakness of the digestive and secretory organs, and is therefore only to be prevented or subdued by restoring them to a state of vigour; in which case the generation of acrimony is checked, what-

ever may be the nature of the foods taken into the stomach.

Many invalids are inclined to give a preference to eggs and brawn, on the supposition that they are very digestible foods. I am of opinion, that neither are so. The yolk of the egg seems to assist the solution of the white, which is an animal jelly; and from the sense of fulness, which a small proportion of this food produces, it is probably highly nutritive; but there are few invalids who do not suffer oppression and colic from the use of eggs; where however no such effect is experienced, there can be no objection to them, especially when employed in pies and pastry; which are certainly rendered more digestible by eggs and butter in a moderate proportion. With respect to brawn, the greatest part of it is a concremented jelly, but it is rendered somewhat more soluble by the powers of the stomach, by the great tenderness of the fleshy part.

There is a much greater objection to the use of tea, *especially green*, in such cases; not only from its peculiar debilitating impression on the nerves of the stomach, speedily
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extended to the nervous system in general; but because its effects are more powerful when it is drank without cream, which qualifies the acescency of the sugar. The Japanese, from an intemperate use of *green tea*,† are subject to consumption and diabetes; the Chinese rarely drink it. Confectionary of all kinds increases the acescency in the stomachs of invalids.

Leavened Bread (without the supposition of its being adulterated with alum) is improper, as it promotes the acid fermentation; and therefore *biscuit* is on the whole preferable to common bread, especially if the latter be newly baked. Brown bread is more digestible than white.

Butter has been deemed a very improper article of food for invalids; but I believe without just cause. To those persons whose chief food is of the vegetable kind, it is a very inoffensive, and indeed useful addition, as it is in all cases where an acid abounds;

† Dr. Falconer has treated pretty much at large, of the injurious effects of Tea, in his work on the Influence of Climate, &c. a work of great erudition, and singular merit. He has, I am told, published a little treatise on regimen during the use of the Bath waters, but I have not seen it.

for we know from experiments, that it is a powerful resister of fermentation: The idea of its becoming rancid in the stomach is hypothetical; for the animal heat is not sufficient to effect this change on good butter, during the time of digestion; and indeed such a tendency is counteracted by the predominant acid. We know that it is a necessary sauce for fish of every kind; and not only makes it sit more easily on the stomach, but seems to promote the digestion: It mitigates, in some measure, the weakening impression of tea and coffee on the nerves of the stomach; and when mixed in a very small proportion with flour not fermented, it makes it more crisp, by dividing the glutinous particles of the flour, as it does those of fish, and thereby renders them more soluble and miscible with the digestive humours, than they otherwise would be: and as in weak stomachs, there is generally an accumulation of mucus, or what is vulgarly called phlegm, and which is nothing more than too abundant a discharge from the glands of the stomach, owing to their weakness and relaxation; so the oily parts
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of our animal food, or butter, which is an animal oil, dispose it to mix more readily with the other contents of the stomach. We know from experiments, that pure oil is not susceptible of rancidity, but that this quality is owing to the mucus which abounds more or less in butter and in all oils.

Butter or oil will, however, relax the stomach, if taken to excess; but not more than jellies or *sodden tripe*: and though, if the bile or other humours were highly putrid, it might be alledged that butter would increase their acrimony, which remains to be proved; yet such an assertion would be nothing to the purpose, as the state of the humours is in the present case diametrically opposite to a putrid tendency.

Doctor CADOGAN'S objection to roasted meats, on account of their juices being rendered rancid by the fire, is only, if at all, applicable to their surface, when scorched by the negligence of the cook; and with respect to the butter with which it is basted, the change produced by it cannot be deemed rancid, but rather an exaltation of its animal nature, similar to the pungency of healthy

healthy bile; and therefore, instead of being injurious to invalids, it has a manifest tendency to correct the acefcent fermentation, and dissolve the abundant mucus; and thereby contribute to a more perfect digestion.

That such foods are not so injurious as the Doctor alledges, is evident from savage nations subsisting in health and vigour under the use of the most rancid oils, and putrescent animal foods. The truth is, that the human stomach in health, has a surprising power of assimilating foods of different qualities, and of converting into salutary nourishment many articles, which the closet physiologist would, from a preconceived theory, deem to be very injurious.

Though cream and butter are not, in a moderate quantity, improper for invalids; yet new cheese is peculiarly so; and, on account of its glutinous curd, very difficult of digestion. Old cheese is not, however, exceptionable; it having undergone a species of fermentation, by which the glutinous part is rendered soluble by the humours of the stomach.

Before

Before I proceed, I would observe by the bye that the regulation of the diet of children, especially the puny, is, I think, founded in error.

Animal food and butter are deemed very noxious to children; whereas I have had the pleasure of restoring many of those young patients, by directing a moderate use of beef and mutton, rather roasted than boiled, as a necessary corrector of the predominant acid and slime generated by vegetable food; and which not only promote the generation of worms, but the production of rickets and scrophula: and if we consider that, from our structure, we are certainly destined to use a mixture of animal and vegetable foods, I cannot see any objection to animal food being a part of the food of children, as soon as they are removed from the breast; the idea of its breeding gross humours being grounded on a false theory.

The same remark is applicable to a moderate use of butter.

Fruits.

I omitted, in the preceding section, to observe, that the sweet and subacid fruits may not

not be improper, as a desert at the tables of the wealthy, provided the stomach has not been previously overcharged; and that many persons in health use the different kinds of nuts without oppression. But with respect to invalids, if fruits do not disagree with them, by producing acidity, they would be more proper before, than immediately after dinner; and may also make a part of a slight supper: but nuts of all kinds, as being difficult of digestion, must be injurious.

Strong Drinks.

I have already expressed my disapprobation of the use of strong drinks in persons of firm health, as unnecessary; and I have known some invalids who have required no other drink but water.

I would here remark by the bye, that Dr. FALCONER has found that in slow and irregular fevers, such as we often find connected with chronic diseases, large draughts of cold water drank immediately from the pump have an excellent effect in suppressing the feverish heat, and consequently in checking the fever; and in one case, I have seen good effects

effects from it, and shall take every opportunity of repeating the experiment. His treatise on the common pump waters at Bath ought to be read, not only by the resident inhabitants, but by strangers.

Wines and beers are in general apt to become sour in weak stomachs; and therefore, if a gentle cordial of this kind seems to be wanted, especially by persons who have been habituated to it, I have found good madeira, porter, or rum or brandy with water, preferable to any other strong drinks.

SECT. III. *Diet accommodated to the cure of inveterate Diseases.*

The diseases which generally come under this description are, gout, scrophula, asthma, consumptive tendency, obstinate obstructions of the liver and other viscera, and certain inveterate diseases of the skin.

Accidental diseases require only a temporary observance of suitable regimen; for the causes of disease being removed, the constitution, by its innate powers, restores the weakened organs to their former vigour. But when a disease, either from being hereditary,

ditary, or by its inveteracy, has become as it were a part of the constitution; nothing but a steady and unremitting attention to regimen, especially of diet, can possibly eradicate the evil; medicine alone being ineffectual.

It is certain that a total change of diet has done much in alleviating or totally suspending inveterate diseases; especially if hereditary. I have known several instances of a strong consumptive tendency, especially when accompanied with spitting of blood, being suspended by a total abstinence from animal food and strong drink; and the reason why this expedient does not succeed more frequently, is, that it is adopted too late; that is, when the lungs are irreparably diseased.

The gout, notwithstanding the many infallible nostrums which are advertised and recommended, has not, I believe, yielded, when inveterate, to any means but an entire change of diet; and in confirmation of this opinion, my gouty readers may be amused, perhaps informed, by the following cases.

Near twenty years ago, on visiting a patient of mine, a ruddy, and apparently robust

bust old man dined with him. I remarked that he ate nothing but pudding, and drank water. Curiosity led me to enquire into his motives for adopting this regimen. He told me, that when he was a young man, he drank hard, and being very quarrelsome in his cups, he came to a resolution of abstaining from strong drink; and being subject to severe attacks of gout, he some years after determined to compleat his regimen, and refrain from animal food. From that time he had been entirely free from gout, and was then 70, in perfect health. I told him that having been fifteen years free from gout, and now at an advanced age, I believed that he could not be essentially injured by a gradual return to the use of animal food and strong drink. He made the experiment, and as he resided in a neighbouring county, I had no opportunity of seeing him afterwards; but he desired a friend of his to inform me, that he had not changed his regimen above six weeks, before he had a slight fit of gout. As I left that county a short time after, I did not learn whether he had any more fits of gout, or had again changed his plan in favour of meagre diet.

An attorney at law, one of the most bulky men I ever saw, had, by intemperance, incurred gout to such a degree, as to be confined for several months every year, and was almost a cripple. The gentleman, whom I succeeded at Guilford, now an eminent physician in London,* being consulted by him, he advised him to enter upon a milk and vegetable diet: This plan succeeded so far, that he not only lost his gout, but recovered the use of his limbs; and when I saw him, had lost a considerable part of his unwieldy corpulency, and was very active.

A man of the profession who drank very hard, was induced, by the severity of the gout, to adopt the same regimen. The change produced the same happy effects; but being a violent partizan for a candidate at a county election, he relapsed into his former intemperance; the gout returned, and at length degenerated into an incurable palsy of one side.

It may be inferred, from the extraordinary effects of regimen in these cases, that the gout is certainly to be eradicated by an ab-

* Dr. Reynolds.

stemious diet; and that every gouty person, who will sacrifice the gratification of his palate to the more important consideration of his ease and health, may certainly annihilate the disease; but I know, from experience, that such a general inference would be very erroneous. The truth is, that several circumstances must concur to render an adoption of the plan successful, or even safe. There must be a certain vigour of the constitution to enable a person to support such a change; and this change must be attempted before the gout has become irregular, and the joints considerably diseased.

When Dr. CADOGAN's pamphlet was generally read, and his plan indiscriminately adopted, without a due attention to circumstances, several cases occurred to me, wherein it certainly was injurious. Some old gouty patients, in a state of decrepitude, and who had lived freely, having suddenly given up their liberal diet for a sparing one, either sunk under it, from an inability to support the violent transition; or were soon obliged to return to their usual habits of life, after an alarming conviction of the danger they

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had

had incurred; and as the idea of a gouty disposition became *fashionable*, several persons, who had always been temperate, entered very precipitately into the new plan, with an intention to anticipate a possibility of their being gouty, or otherwise diseased, and thereby reduced themselves to a dangerous state of weakness.

The Doctor erred, chiefly, in not pointing out, with precision, the circumstances under which such a plan was safe and practicable; and he farther erred, by requiring a violent and sudden departure from inveterate habits of life: for though his regimen did not require a total abstinence from animal food, yet the transition was unsafe, because too precipitate.

I am however convinced, that, unless the constitution is totally worn out, there are few cases of inveterate gout, which may not be greatly mitigated, if not absolutely cured, by a very gradual change of diet, until it is compleatly effected: and, under this precaution, there are few curable chronic diseases, in which it will not be useful, though, I believe, nothing short of a total abstinence
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from animal food and strong drink will effectually answer the purpose; and so far Dr. CADOGAN's plan certainly falls short of the purpose.

Some persons, encouraged by the Doctor's opinion that an invalid ought rather to drink his quantum of strong drink at one sitting, than a divided portion of it every day, have made the experiment; but with little, if any success; and indeed the principle on which the injunction was grounded is erroneous.

In one case of inveterate asthma, and a single case of enlarged liver, where the other bowels were supposed to be much diseased, the diet I have recommended, not only prolonged life beyond what might have been expected, but rendered it much more comfortable; and I am convinced, that in such deplorable cases, such a diet is the dernier resort, when all medicines fail. But few will be found, who have resolution sufficient to persevere.

Milk, which constitutes the chief part of food on this reduced plan, rarely sits easily upon the stomach at first; but small doses of magnesia, colombo, and ipecacoana, will at length

length effect the purpose of rendering it digestible.

Whey and butter-milk are, I believe, in many instances, preferable to milk, as an article of diet upon this plan: I knew one patient on the continent of America, who was cured of a most inveterate leprosy by such a diet; and I have been informed of an instance of scrophula being cured by a course of whey.

It is not, perhaps, easy to determine, how such a regimen contributes to eradicate obstinate diseases; but it is most probable, that the beneficial change made, is rather on the secreting organs, than the humours they secrete; and I am inclined to believe, that the idea of diseases being generally produced by some fault in the blood or humours, is the result of false theory, and has been productive of erroneous and frivolous practice.

To conclude: as we swallow our foods by pounds, and our medicines by scruples and grains, a due attention to diet will often do more than medicine itself; and if persons who find themselves indisposed by excess, would practise a pretty rigid abstinence for
a day

a day or two, many diseases might be prevented, or checked at their commencement; and hence, the vulgar proverbial maxim, that we ought to nurse a cold, and starve a fever, is often a dangerous one: For though fevers of a certain kind require a low and abstemious diet, there are many circumstances which occur in particular fevers, which require a different plan of management; whereas, in recent colds, abstemious regimen is always the safest mode of treatment; and by this means fevers, and especially consumptions, the baneful disease of this climate, would much less frequently be the consequence.

CH A P. II.

CHOICE *of* HABITATION, *or* OCCASIONAL RESIDENCE.

THE great Hippocrates, and every physician since his time, have considered choice of habitation as a very essential circumstance toward the prevention or cure of diseases.

If a man of fortune intended to build a mansion, it would be prudent to consult a physician concerning its air, soil, aspect, and the water he must use. But it would be foreign to my purpose to enter on the subject of site on so extensive a plan; as I intend only to offer a few hints to invalids.

A house situated on a gentle declivity, in a gravelly soil, with a southern aspect, sheltered from the north and east winds, and in the neighbourhood of the sea, would be the most eligible. The apartments ought to be spacious and lofty, especially the bed-chambers; and the casements so constructed as to permit the upper sashes to be lowered to such a degree, so as to promote a constant ventilation: stoves, for reasons already assigned, are preferable to open grates.

The water employed for drinking, and the use of the kitchen, ought to be clear, without smell or taste, and such as readily breaks soap.

Thick woods, or stagnant waters, whether ponds or marshes, are generally deemed unwholesome when near a mansion; and the adjoining roads ought to be safe and commodious for the purpose of exercise.

As this climate is, perhaps, the most unsteady of any in Europe, it would be proper that wealthy invalids, the consumptive especially, should retire to a southern part of the continent, as Nice, Naples, or Lisbon, or to the island of Madeira, and there reside from the month of September or October to the middle of May, accompanied by a skilful, humane, and chearful English physician, whose advice ought to be solely relied on, and implicitly complied with: for it is most certain, that the physicians on the continent are a century behind us in medical knowledge; those of France, Italy, and Portugal, especially.

The journey and the diversity of objects, may contribute to amuse the mind; for with respect to the accommodation of invalids, no country I have visited is in any respect to be compared with this.

But as many invalids are unable to incur the expence of such excursions, there is no other alternative, if their circumstances will permit, than to change their residence in this country according to the changes of season, which must be left to the judgment of their physician.

C H A P. III.

CLOATHING.

AS nature has provided all other animals with various defences of hair, wool, feathers, or scales, by which they may resist the noxious impressions of different elements; so instinct has dictated to man, even in his savage state, the necessity of covering, in proportion to the inclemency of countries and seasons.

In civilized societies, the improvement of arts, the facility with which men are supplied with the conveniences and luxuries of life, and the gratification which these afford, have disposed mankind to be perhaps too solicitous about guarding against the inclemency of seasons; and hence it is, that our bodies being rendered more tender and delicate, and our feelings more acute, we find, that in proportion to the increase of luxury, we become less hardy; as being more obnoxious to the influence and impression of manifold causes of diseases.

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As a physician cannot, any more than a legislator, always effect a proper change in the national manners and morals, it is incumbent on both to establish such regulations as the habits of the people will admit of.

It is very much to be regretted, that luxury has in some degree extended its influence to all ranks of the community; by which the bodies of the most useful members of it, the middling and lower ranks, are more enervated than those of their ancestors.

With respect to persons of hale constitutions, and in high health, very warm cloathing in the day, or covering at night, would be very improper; and under this head we may bring, very properly, the size and warmth of our apartments, especially our bed-chambers; upon which I have already made some remarks in a former chapter.

The grand rule is, so to regulate our cloathing and covering, that, when we expose ourselves to the external air, the difference of the temperature of the air in both situations shall be such, that we shall not be susceptible of dangerous impressions
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under any inclemency of season when we go abroad.

Persons in firm health ought therefore so to regulate the temperature within doors, as that it shall not exceed 56 degrees of the thermometer in the winter, spring, and autumn; and in the summer, bring it as near to that as possible, by admitting fresh air.

But the chief intention of this essay is, to offer hints to the delicate and invalid part of my readers.

Were it happily in our option to attain all the requisites for forming a firm constitution, no man of common sense would spare any pains to acquire them: but this is not always in our power. A weakness of constitution is often hereditary; or it may result from diseases, either unavoidable, or the effects of negligence or inattention.

Under such circumstances, we must be content to accommodate ourselves to our situation, and prudently avoid all such extremes as may impair health.

With respect to clothing, such addition ought to be made to it, in cold and damp weather,

weather, as to protect the body against the sudden and severe impressions of either.— That great philosopher and good man, Mr. Boyle, had cloaks accommodated to different seasons and changes of weather; and invalids ought rather to exceed than be deficient in the warmth of their clothing; those especially who are subject to catarrhal coughs, those whose nerves are weak and irritable, and those who are gouty and rheumatic.

Such persons ought in the beginning of September to wear a flannel waistcoat over the shirt or shift, and towards the end of October, next the body; taking care to defend the lower limbs by flannel petticoats, or woollen drawers, and stockings.

Such persons as wear flannel next the body are apprehensive of changing this part of their clothing, lest they catch cold, and therefore continue to wear the same garment through the winter; and as the warm weather comes on cut it away by degrees. But this precaution is not only unnecessary, but to persons of delicacy must be offensive, and indeed injurious; as thereby a part of the perspiration, accumulated for months, is retained

tained in constant contact with the surface of the body.

I can however aver, from long personal experience, that the under waistcoat may be safely changed once or twice a week; and as the weather becomes more mild, it may be worn over the linen, and at length totally left off till the subsequent autumn.

I hope my fair readers, if any such there be, will pardon me for animadverting on an article of their clothing, which I have long considered as extremely prejudicial, especially to the younger part of the sex: I mean the *stays*. For though the prevailing *fashion* has allowed them a little more latitude than formerly, this part of their dress is still too strait and tight, especially for invalids; many of whose complaints are probably produced, but all exasperated by this coat (not of mail, but) of whalebone. However, as from custom they require some support to their chest, I would recommend stiffened jackets, or the old boddice, in lieu of stays; and in cold weather, they may be lined with thick flannel.

The feet ought to be well defended with thick shoes. As cleanliness contributes
much

much to health, invalids ought to bathe their feet and legs once a week in warm water; and when it can be conveniently done, use a moderately warm bath once a month.

As the due preparation of our foods depends very much on their being thoroughly chewed, much care ought to be taken in preserving the teeth, and keeping them clean.

With respect to covering whilst in bed, much will depend on habit. The head ought to be peculiarly well covered whilst we are in bed, because colds and rheums are thereby prevented; and it is remarked, that as foreigners are more attentive to this circumstance than we are, they are less subject to coughs, and their teeth are in general more sound.

People in health ought never to have their beds warmed; not only because the fumes of the coals are in some degree noxious; but because warmth thus applied enervates the body. To avoid the disagreeable impression of a cold bed, Dr. FRANKLIN judiciously recommends a cold air bath, by standing naked in the cold for a minute or two before we go into bed; and I will add, that a similar exposure

exposure in a morning, whilst the whole body is well rubbed by the flesh-brush, would be of great use.

But such expedients ought to be very cautiously adopted by invalids.

With respect to them, airing the sheets every night before the fire, so as to evaporate the perspiration they may have absorbed the preceding night, may be of use; and is a salutary substitute for bed-warming.

Though a very eminent physician seems to consider damp rooms and cloaths as seldom or ever productive of any bad effects; yet, the many instances of dangerous and fatal consequences from damp linen and sheets, to the most healthy, ought to make invalids, especially, very careful in those points.

With respect to the quantity of bed-cloaths, it ought to be such as may, in a reasonable time after we are in bed, promote an equal but insensible perspiration; and if on awaking, at any time in the night, we find ourselves so much heated as to be obliged to throw a part of them off, we may be assured that the quantity is too great: it will be right to cover the legs more warmly than
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the upper parts of the body, as the circulation in the extremities is more languid, and the warmth of those parts necessarily less: and as invalids rarely fall asleep until there is a gentle perspiration on the extremities, it will be right to procure that as soon as possible.

I need not repeat what I have already said on the benefits which must accrue from sleeping in a large and well-aired chamber. When there is a constant circulation of fresh air, we are much less incommoded by heavy bed-cloaths.

CHAP. IV.

EXERCISE.

MAN was destined to labour, and the major part of every community is reduced to the necessity of procuring thereby daily subsistence.

Exercise, in a moderate degree, promotes the circulation of the blood, renders the
limbs

limbs pliant and vigorous, gives firmness and elasticity to the muscular fibres, promotes digestion in all its stages, distributes nourishment to every part of the body, promotes the finer discharges, especially perspiration, and invigorates the nervous system:—

When excessive, it renders the circulation unequal and impetuous, disturbs all the functions, wastes the solid and fluid parts of the body, fatigues and enfeebles the muscles, and weakens the springs of life: hence very laborious persons die of a premature old age.

Another evil attending the most laborious, and therefore the most useful members of the community, is, that the supplies of food are often too scanty, and disproportioned to the waste; and that their occupations either expose them to the inclemencies of the seasons, or to unwholesome and even noxious effluvia: as those of miners, plumbers, &c.

If we consider exercise as the means of preserving health in those whose station of life exempts them from the necessity of labour, it is evident that it ought to be proportioned to the mode of life.

If a man indulges a keen appetite, and, from his affluence has the means of gratifying it by the choicest viands and the richest wines, he has his alternative, either to use adequate exercise, or suffer all the consequences of repletion. Besides those keen sportsmen who at certain times undergo much fatigue in pursuit of amusement, people of rank and fortune have very generally acquired a daily habit of taking exercise, especially on horse-back. Some of them, however, as an apology for their indolence, have advanced an opinion, that when exercise is become habitual, or is undertaken with reluctance, it ceases to be a benefit. With respect to habits, provided they are rational and beneficial, they ought not to be given up; and though remedies used with a confident expectation of relief from them will be more likely to be useful; yet physicians know that a reluctant use of remedies does not consequently counteract their salutary effects, otherwise diseases would rarely be cured. The remark is applicable to exercise, whether as a preventive or a remedy.

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Though I would not discourage the use of exercise, yet I would observe, that it is not, under every circumstance of life, indispensibly necessary; for innumerable instances occur, where studious men and sedentary women have lived to a great age, without suffering *apparently* by their indolence: and the sufferings of studious men seem to have arisen more from the intense exercise of the mental powers, than from want of bodily exercise.

But it is indispensibly necessary that such persons should be exceedingly temperate, even to a degree of abstinence; and, in such cases, the organs, not being oppressed by surcharge, perform their functions without injurious exertion.

Exercise may be divided into active and passive. The active exercises are, walking, riding, dancing, swinging of leads, the dumb bell, and the chamber-horse, &c. The passive are, chiefly, carriage exercise, and the use of the flesh-brush.

The active exercises are best suited for the preservation of health, and to those invalids whose strength is not much impaired; but in all cases care ought to be taken, that
whatever

whatever the exercise may be, it ought never to be carried so far as to produce great sense of fatigue, otherwise, instead of being beneficial, it may be very injurious.*

In all acute diseases, especially accompanied with any considerable degree of fever, rest is necessary, and exercise improper. But, in many slow diseases, even though accompanied with irregular fever, gentle exercise is of great use: but in all cases in which exercise may be of use, it is necessary that it be taken in a pure clear air, if it be practicable; otherwise a variety of domestick exercises may be substituted, under a circulation of temperate air.

When invalids are very weak, and can use no other exercise, a cotton hammocoe or cot, slung in the sick chamber, in the manner they are used in the West-India colonies, will

* Dancing, when used temperately, is a cheering salutary exercise; but at watering-places, and especially at Bath, where the opportunities are so frequent, persons who labour under various degrees of indisposition (the ladies especially) indulge themselves too much in this pleasing amusement; and many have been irreparably injured by excess in country-dancing; especially since the cotillon step has been adopted from our light-heeled neighbours, which renders the exercise much more laborious than formerly.

Another error committed by meeting so late at those assemblies; for when they do not break up before eleven o'clock, it is midnight before the fatigued invalid can retire to rest.

be useful, by swinging the patients to any degree they can bear.

When invalids return from their exercise, and find themselves chilled by the cold air; instead of warming themselves at the fire, it would be preferable to bring themselves (or rather their feelings gradually) to the temperature of the air of the room; for every sudden transition is injurious to enfeebled bodies.

C H A P. V.

REST.

THIS term implies, not only a relaxation from labour and fatigue; but also sleep.

The effects of sound sleep are, a more slow and equal circulation of the blood, and a more temperate and steady distribution of the nervous influence to the organs of involuntary motion; the chief of which are the heart, lungs, and organs of nutrition; whilst those which supply the muscles, as
organs

organs of voluntary motion, are allowed some hours relaxation from laborious exertion; and the mind, by a sweet and salutary oblivion, is relieved from its exertions, its cares, and anxieties; so that the waste both of mental and bodily powers is compensated by sleep; and both are restored to pristine vigour.

If sleep be too long protracted, the body is enervated, instead of being refreshed; and the powers of the mind become languid and oppressed.

Disturbed and broken slumbers, instead of relieving either body or mind, enfeeble both, perhaps to a greater degree than even exercise itself; and have, perhaps, as bad effects, especially on invalids, as uninterrupted watching.

Those animals who instinctively follow the dictates of nature, go to rest as the sun descends below the horizon; and awake as he ascends above it. Even man, when not far remote from a state of nature, obeys her dictates in the same manner. Darkness is best adapted to a state of rest, as light is to our daily employments; and therefore those

who deviate from ~~this~~ law of nature, must necessarily and eventually pay the penalty.

A noble Lord,* who formerly distinguished himself in an eminent degree at the bar, informed me some years ago, that when any very old witnesses presented themselves in court, he upon enquiry found, that, whether their modes of life had been temperate or intemperate, they always went early to bed, and rose early.

Invalids, whether from weakness, or fatigue after exercise, often express an inclination to sleep for an hour during the day; nor do I conceive that there can be any cogent objection to this indulgence being granted them: as their exhausted spirits are recruited by this recess from bodily and mental exertion, and their sleep during the night is very little, if at all, interrupted by it.

From the effects of sleep enumerated above, my readers will infer, that as regular hours are necessary to the preservation of health, so they are indispensibly necessary for the recovery of it; and that balmy repose, which suspends the distressful sensa-

* Lord Grantly.

tions consequent of ill health, is only to be obtained by habitually appropriating those hours to sleep, which nature has pointed out; whilst by inverting the order of nature, we waste many of those hours, which might be usefully employed, even by the opulent and independent.

C H A P. VI.

REGULATION of the PASSIONS.

THE passions (says Pope) are the gales of life; but if they are not happily tempered either by constitution, or by education, neither rank nor wealth can afford any compensation for their baneful influence.

It may, with truth, be asserted, that artificial wants, as they enlarge the field of passion, so in the same proportion they increase our desires of gratification, and afford more frequent occasions for disappointment and mortification, than of rational enjoyment.

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The only means to avoid these evils, is not to employ the mind solely in frivolous pursuits; but to strengthen its powers, and ennoble and exalt its views by the acquisition of useful knowledge.

I hope the fashionable youth of both sexes (if any such shall deign to read this morceau) will not be offended at this *apparent* departure from my medical office by commencing preacher; for though sermons by a physician would not be quite a novelty; yet it may be doubted, whether, in the present age, the imputation would not be unfavourable to its acceptance with the public.

The truth is, that as strength of mind, and culture of the understanding, enable us to perform the duties, and relish the pleasure of life; so nothing contributes so much to enable us to support the evils of it with firmness, and, in the same degree assists in alleviating and surmounting our bodily ailments.

There is so intimate a connection between the mind and body, that they mutually influence each other; and hence it is that bodily diseases are either exasperated or alleviated

viated by the state of the mind. It is therefore of the utmost importance, that the mind of the invalid be sustained by hope, and cheered by diversity of amusement; and that every serious avocation and painful passion be industriously avoided.

It is for this reason that change of place has been so much recommended to invalids; and excursions to watering places have been thought to contribute very much to the efficacy of medicinal waters, on account of the diversity of amusement, which those places afford; but which, by misapplication, is often hurtful.

ESSAY IV.

An ENQUIRY concerning the propriety, or necessity, of using other REMEDIES, during a Course of MINERAL WATERS, or of SEABATHING.

WATERING places have for some years been very much resorted to, not only for the purpose of amusement and dissipation, but for the benefit of invalids.

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Though physicians have, in general, approved of sea-bathing, as a powerful remedy; yet they have not been so unanimous with respect to the efficacy of other mineral waters.

Some physicians have been of opinion, that the proportion of their active principles is so small, that they are very little better than common water; whilst others, acknowledging the efficacy of some, have denied the medical virtues of others.

It is probable that, whilst the physicians who reside at watering places, have, from local experience acquired an overweening predilection for particular mineral waters; others, not having been in the habit of considering them as a part of medicine, are disposed to undervalue them.

There is a considerable diversity of mineral waters in this kingdom, which, from the nature of their active principles, must have different powers, and consequently must be adapted to the relief of different diseases.

Of those invalids who resort to watering places, some consult the resident physicians, others are furnished with prescriptions and general directions by the physicians or apothecaries

thecaries who send them thither; some put themselves under the direction of apothecaries, and not a few, deeming all advice unnecessary, act according to their own opinions, feelings, and caprices.

If we consider mineral waters (including sea-water, which is of this class) as medicinal; and if we suppose that some previous preparation for, or regulation of, their use, may be necessary; it is likely that those who enter on a course of them without advice, may not merely lose their time and money, but actually injure, and even destroy themselves.

The late Lord *Strange* (as I am informed by Dr. *Falconer* who attended him) died of an apoplexy, in consequence of injudicious use of the Bath waters; and Baron *Dimfdale* tells me he recollects a similar instance many years before: The instances of the alarming and dangerous, though not immediately fatal effects of these waters, when used improperly, are very numerous:—An incontrovertible proof of their powers.

Were distant physicians, who send patients hither with general directions for the use of the waters, supposed to be quite as well acquainted

acquainted with their qualities and effects as those who reside here; *a supposition not to be admitted*; yet no medical man will venture to assert, that a variety of circumstances may not arise, which cannot be foreseen, and consequently cannot be provided for: and indeed instances of that kind occur daily, even under the eye of the resident physicians. It has been said, that the apothecary, to whom the prescription is sent, may be a competent judge of the necessary regulations. Though it would be invidious to controvert this position; yet it may *at least* be asked why, if a patient's case is so urgent as to require the advice of a physician in London, or elsewhere, it should be less necessary to consult a physician at Bath also; who may justly be supposed to be more conversant with diseases in which the Bath water is beneficial, than those who send the patients hither.

It would not, indeed, be matter of surprise, if one apothecary were disposed to transfer his patients to another; yet this happens very rarely: whilst, from the conduct of some physicians, it might reasonably
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be supposed, that they considered apothecaries as their only coadjutors. Whether this is the result of extreme humility, excessive arrogance, or mean jealousy, they alone must determine.

But it has been whispered by some of their patients that have come hither, that they were dissuaded from consulting Bath physicians, not only because it was unnecessary, but from a *tender regard* to the patient's pockets; their doctors insinuating, that, if they once got into the hands of the resident physicians, it would not be easy to shake them off. I trust however, for the credit of the profession, as gentlemen, that very few have been so uncandid and unjust; but I know that the imputation is not totally without foundation, and that some of their patients have suffered thereby, not only in their purses, but in their healths.

Among many other instances which have occurred, (I shall mention one.

A person of fortune, on his arrival here, sent a physician's prescription to a judicious apothecary, who, on calling on him a few days after, found him much heated, and exceedingly

ceedingly distressed, by an intemperate use of the waters; though the mode of using them, as directed by his London physician, had been strictly complied with, and the other remedies prescribed were taken very regularly. The apothecary, in vain, persuaded him to desist from both, and to consult a resident physician: he replied, that he was strictly enjoined not to do so, but to correspond with his London doctor only. The doctor, on being applied to, insisted on a continuance of the waters, but changed his prescription; with so little success however, that he was sent for by express; and his fee amounted to a much larger sum than would have procured his patient the attendance of half the physicians in Bath during the whole season.

As I have almost totally declined the practice and emoluments of my profession, I shall not be suspected of partiality, when I declare, that, *a few instances of dirty intrigue, and sordid avarice excepted*, no professional men I have ever known discharge their duty in general with more liberality and disinterestedness than the physicians of this place; or derive more moderate emoluments from it.

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It happens, not unfrequently, that the cases of the patients who come hither to use the waters are such as will not admit of their use; so that when a physician has been consulted, he has been obliged to forbid their being used, and either to send the patients back to their quondam prescribers, or undertake their relief by other means.

A gouty patient consulted me last summer for some complaints which were found to be connected with gravel. As I could not remain at Bath so long as was necessary, I left him under Dr. *Falconer's* care; by whose judicious management he was perfectly relieved, without the use of the waters.

In my limited practice I have met with some other instances of invalids, who have been sent hither for the benefit of the waters, whose cases were totally incompatible with their use. On the contrary, it happens, I believe, very frequently, that in diseases in which the Bath waters are eminently useful, they are nevertheless deemed improper by those who, from inexperience of their powers, are certainly incompetent judges.

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The celebrated Dr. *Mead*, under the influence of a preconceived hypothesis, condemned their use, as a bath, in paralytick cases; though the internal and external use of the waters has been found to be more beneficial in such cases, than all other remedies whatsoever. A very late occurrence has convinced me that some of the most eminent physicians in London still adopt Dr. *Mead's* opinion; though manifold proofs of the safety and efficacy of warm bathing in palsies occur daily in private and hospital practice.

A lady of my acquaintance, being on a tour with her daughter, who was in a bad state of health, sent for me, as she passed through this place in her way to Bristol. It seems her *doctor*, a *prescribing apothecary*, had reprobated the use of the Bath waters.

On a casual enquiry into the case, I was of a different opinion; but as I was on the point of making a summer's excursion, and the lady declined consulting another physician, I left her, with necessary directions, to the care of a judicious apothecary; and by a letter from the lady, I had the pleasure of knowing that my opinion with respect to
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its being, in every respect, a Bath case; and my prediction, that much benefit would accrue from the waters, was verified beyond my most sanguine expectations.

I know there are some medical men who take every opportunity of reprobating the use of Bath waters, in cases where other remedies avail very little without their assistance: the most favourable construction that can be put on such conduct is, to suppose that they know very little of the powers of the Bath waters: for I am unwilling to suppose it possible that they can be actuated by illiberal motives.

I shall conclude this chapter by an enquiry how far medicinal waters may, or may not, require the use of other remedies.

The physicians of the present time, are much more simple in their modes of prescription than their predecessors; and when patients resort to watering-places, a prudent physician will cautiously avoid the imputation of selfishness, and therefore will prescribe as sparingly as possible, during a course of sea-bathing, or the use of other mineral waters.

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But it frequently happens, that the occasional use of other remedies may be indispensibly necessary.

It is well known to medical men, that, when diseases are inveterate, we are often obliged either to change one remedy of the same quality for another, or increase the power of one medicine by the addition of another. This is the case also with medicinal waters, which, though in some cases they may require very little if any aid from other remedies, yet in many instances they are not alone sufficient to effect the purpose.

Few patients are in such a state as to be able to enter on a course of this kind without some preparatory medicines; and with respect to the use of Bath water, this is peculiarly the case. After this necessary preparation, the dose of the water is to be ascertained, and the medical man (whether physician or apothecary) must watch the effects of the waters, and determine from time to time what increase of dose his patient will bear. Bathing may be, and is often, necessary: the times of bathing, the degrees of heat, and other circumstances, can only be ascertained
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by careful observation: the regimen of diet, &c. must moreover be fixed upon, and the regulation of all those important points must depend on the nature of the disease, and the effects of the waters.

Many untoward circumstances may occur, which may render the interposition of the prescriber necessary. Drinking the waters, or bathing, under the most guarded use of either, may produce disagreeable symptoms, which may require either some alteration in the mode of using them; a total suspension of the use of them for a time, or the interposition of some remedies, which may qualify their effects, increase their power, or remove such symptoms, which either they, or some casual incidents, or a change in the disease, may have produced.

In the course of last summer, I had many opportunities of confirming this opinion. Being on the sea coast, and acting there as a *volunteer* physician, I was very generally consulted by those who resorted thither for the purpose of sea-bathing. Several were sent thither whose cases were improper; and others could not bear the cold bath, unless

accompanied with the use of cordial and strengthening medicines.

In the General Hospital here, many more patients recover than in private practice: the reason is, that the patients are obliged to comply most strictly and implicitly with the physicians' orders, respecting diet, medicine, and the use of the waters; whilst, from inattention, dissipation, or self-sufficiency, private patients frequently fail in obtaining relief, and often return much worse than they came hither. But whether medicine may or may not be required in aid of mineral waters of any kind, it is manifest, from the foregoing observations, that courses, whether of drinking or bathing, ought not to be undertaken without medical advice and attendance.

E S S A Y V.

C H A P. I.

On EMPIRICISM, or QUACKERY.

Hæ tibi erunt artes.

Pudet hæc opprobria nobis.

THE term *Empiricism* is derived from a Greek word which signifies *experience*, the foundation of all science, especially of physic.

There was an antient sect of physicians who were termed *Empirics*, in contradistinction to the *Dogmatists*; but there is a most essential difference between those *antient sages* and our *modern quacks*; for the former availed themselves of accurate philosophical *Analogy**

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founded

* *Analogy*, which is derived from a Greek word implying likeness or similarity, is the art of comparing one object with another, with a view to determine whether, or in what degree, they do or do not resemble each other in their nature or qualities. It is a branch of logic, a science much less cultivated than it ought to be; as it is the foundation

founded on experience; whereas the latter are so little accustomed to any kind of reasoning, that they are generally destitute of common sense.

Few men have taken more pains in attempting to discover the origin, trace the progress, and detect the ignorance and knavery of modern quacks, than myself; and as quackery has arrived to a truly alarming height, especially in the British dominions; I thought I should essentially serve my fellow subjects, by endeavouring to stem the torrent of this dangerous evil.

The earliest source of quackery seems to have been an opinion entertained by the vulgar, and perhaps not very strenuously discouraged by physicians, that there was something mysterious and supernatural in

dation of all sound reasoning. We cannot proceed a step in any science without analogy; for we must compare before we decide.

The mathematician employs analogy in the solution of his problems: Analogy is the basis of natural and experimental philosophy: The moral philosopher uses it as a test of moral rectitude or depravity: It is the touchstone of religion, the guide of the politician, and the rule of conduct in common life. In no instance, however, is it so indispensably necessary, as in the medical art; and I am convinced, that if, instead of vague theories and fanciful hypotheses, it had been employed by physicians with caution and precision, physic would, long before this period, have been exempted from the invidious imputation of being conjectural and precarious.

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the medical art. Hence the idea that the cure of diseases was often effected by magical powers, and astral influences; so that in the ages of barbarism, priests, soothsayers, astrologers, and fortune-tellers, laid their claims to medical knowledge and practice.

When chemistry began to be cultivated in Germany, many chemical remedies were discovered and adopted in regular practice: The empirics however, having pilfered some of the most powerful from the regulars, sold them as nostrums; and Paracelsus, Van Helmont, and other quacks, by their vain and insolent boastings, contributed very much to the extension of the evil.

For many ages all medical knowledge was conveyed in the dead languages only, a few books excepted, written by Arabian physicians in their native tongue; and I may venture to assert, that the translation of those works into modern languages, especially the dispensaries of the different colleges of physicians, has contributed exceedingly to the encouragement of quackery; for from that source the most ignorant, and worthless members of the community, having acquired some knowledge

knowledge of the most powerful remedies, found a more ready resource for supplying their necessities, and even attaining affluence, by vending them as infallible nostrums, than by following their proper vocations of astrologers, almanack-makers, taylors, coblers, weavers, farriers, porters, and footmen.

Whilst itinerant mountebanks were in fashion; though the breed is almost extinct in this country; the merry-andrew generally succeeded his master, and from tumbler and buffoon was exalted to the dignity of doctor; when in the velvet coat and tye wig he drew teeth, cut hare lips, and dispensed his infallible remedies, *solely* for the benefit of his fellow subjects.

Several of those respectable gentlemen became afterwards resident doctors, especially in London; and to some of them, and their no less respectable successors, the public is at this time indebted for some of our most celebrated nostrums.

- It may be alledged, that these animadversions are dictated by envy and jealousy.

Independent in my circumstances, and approaching the verge of life, I do most solemnly

lemnly aver, that I shall not advance any thing concerning those men or their nostrums that does not admit of proof; and that my sole motives for this publication are, a regard for the interests and welfare of the community, and the credit of that profession of which I have the honour of being a member.

When physicians, by laborious study, and at considerable expence, have qualified themselves for the exercise of their profession, it cannot be very agreeable to them to find their art so much degraded, as that the most illiterate of mankind (for such quacks generally are) could be supposed capable of discharging the duties of it: For so far as regards emolument, I verily believe that physicians suffer little by empirical practice.

With respect to the employments of those people before they commenced nostrum-mongers; the celebrated *Ward*, whose remedies are now neglected, because they are known, was a *footman*, and during his attendance on his master on the continent, obtained his nostrums from the monks, who are almost all quacks.—*Rock* had been a porter,

porter, as was *Walker* the vender of the famous Jesuits drops.—The celebrated electrico-magnetical *Graham*, who lately made such a noise in this credulous nation, exhibited on a mountebank stage in America; and, it is probable, served previously in the office of zany.—*Meyerbach*,† who has acquired a fortune equal to that of a German prince, offered himself as a *rough-rider* to a riding-house in London, but being rejected, commenced doctor.—*Turlington* was a broken inaster of a ship.—One *Freeman*, who annexes M. D. to his name, was a journeyman blacksmith, and is lately returned from one of our colonies, where, as an indented servant, he was employed to shoe and bleed horses.—And I remember two fellows in Hampshire, who gathered and dispensed their drugs under astral influences, one of them a *weaver*, the other a *cobler*, who being too idle to follow their employments, found their account in becoming doctors.

Some of these nostrum-mongers have been appendages to the profession; and broken

† The ignorance and effrontery of this fellow has been properly exposed by Dr. *Lettſome*.

apothecaries and chemists have quitted their proper callings for this idle trade.

Dr. *James*, finding that book-making was a losing business, derived more advantage in vending his celebrated powder, and analeptic pills.—Sir *John Hill*, also a voluminous author, dispensed his tinctures and essences :—and *Norton* acquired a considerable fortune by his *Maredant's* drops.

The newspapers have just announced the death of one of these doctors, who has of late been much celebrated. This man, who could not procure bread as an apothecary, would soon have realized a large fortune as a quack. Availing himself, very artfully, of *fashionable* prejudices, and in order that his pills might be adapted to all the fashionable diseases, he wrote a pamphlet to prove that nervous and bilious diseases were intimately connected with gout and with each other. As some sort of reasoning and argument is generally expected in medical dissertations, he pilfered, without acknowledgement, an idea started thirty years ago by Dr. *Shebbeare*, viz. that the primary cause of all diseases proceeds from excess or defect of the electric fire;

fire; the novelty and *verity* of which could not fail to recommend it to his fashionable readers.

That these men, at least most of them, have pilfered their nostrums from regular practice, admits of the clearest proof. The specifications of some of the most powerful of those nostrums, given upon oath, are to be found in the patent office; to which any person may have recourse on paying the fees; and most of the others have been analysed, and their composition discovered.

Another artifice employed by those pests of society, is to attribute their nostrums to some celebrated physician after his decease; and the names of *Fothergill*, *Hunter*, and *Solander*, have been prostituted to those knavish purposes.

It is now well known, that *Ward's* medicines, except his paste, which is a most absurd composition, had long been in regular practice before he adopted them.

Turlington's balsam is the Traumatic balsam of the shops. *Norton's drops* are a disguised solution of the sublimate mercury, which was recommended by Baron *Van Swieten*, physician

physician to the late Empress of Germany. *Daffy's Elixir* is the tincture of senna of the shops. *Anderson's Pills* are aloes with oil of aniseed. *Speediman's Pills*, extract of chamomile, aloes, and one or two other trifling ingredients. *Stoughton's Drops*, the stomachic tincture of the shops. *Godfrey's Cordial*, an infusion of saffraas, syrup, and opium. *Baume de Vie* consists of aloes, rhubarb, and salt of tartar, with a large proportion of liquorice juice to disguise the other ingredients. And *Poudre Unique* is a combination of mercury and antimony. In short, there are none of these nostrums that have not been analysed by skilful chemists; and, independent of some trivial additions, all of those of any power (a few trifling tinctures of vegetables, those of *Hill* particularly, excepted) are compositions of mercury, antimony, or opium.

James's celebrated powder, it is asserted, was known and administered in this country above one hundred and twenty years ago; but fell into disuse, and was again revived as *Cornachine's* powder. About the year 1746, Baron *Schwanberg*, a needy adventurer, communicated

communicated the prescription to *James*, then as needy and obscure as himself, on certain conditions of co-partnership, which not being fulfilled on the part of *James*, a law-suit was instituted against him in Westminster-hall; and *James* attempted to evade the penalty, by alledging that he employed a different kind of antimony in the preparation; a plea which would not have been admitted by a jury of chemists.

It would however be illiberal and unjust to alledge, that, absurd and unchemical as the preparation certainly is, it is not a remedy of power and efficacy; for, from my own extensive experience, I know it to be so; but the same experience enables me to assert, that, from the nature of the composition, its operation is very uncertain, and that the other reguline preparations of antimony are more safe and certain in their operation, and equally effectual.

The only circumstance which established the credit of this powder was the bold, yet judicious, practice of gradually increasing the dose according as the stomach became more habituated to its stimulus, or the urgency

urgency of the case required: and I cannot help expressing my surprise that this mode of administering active remedies has been so much neglected by regular practitioners; and I am well convinced from long experience, that if antimonial wine, emetic tartar, or even ipecacoana, (a more safe and perhaps equally effectual remedy) had been so administered, we should not at this day have incurred the reproach of being obliged to resign our patients to the operation of a quack remedy. It is however to be observed, that though much benefit will certainly result from increasing the doses of active remedies, if they are given by persons of judgment, much mischief will also be done if those who administer them are unskilful.

It would be a tedious and unprofitable task to enter into a more explicit detail of nostrum-mongers and their remedies: I have however taken notice of some of the principal; and would add moreover, that as these quack medicines are sold to retail dealers, some of them may remain on their hands for years, until they are totally spoiled, and yet they do not scruple to sell them, ignorant
or

or regardless as they are, whether they are found or not, an instance of which occurred lately to a gentleman who purchased a quack remedy.

There was a time when physicians deemed it inconsistent with their dignity to consent to the administration of quack remedies; but if, from a knowledge of their composition, or experience of their effects, we are assured of their safety and power, it would be unpardonable in a physician to reject any means that may be beneficial to his patient; if he or his friends require it.

Nor is the art degraded by such condescension; for we only avail ourselves of those means which have been pilfered from regular practice, (as James's Powder, and almost all other nostrums of efficacy, have been :) but even were it otherwise, life and health ought not to be sacrificed to idle punctilio; but every means used, and every effort made, that may conduce to the relief of the patient.

One great objection to the use of powerful nostrums, in the way they are commonly administered, is, that as neither the venders of them, nor the purchasers, are judges of
the

the cases in which they are recommended, there is more than an equal chance that they may be injurious: I will explain this matter.

When a physician is consulted on a case, he generally visits the patient from time to time; or the case, if the patient is distant, is accurately described by a medical man, who, together with the account of symptoms, enumerates the remedies that have been previously used, and their effects. But notwithstanding all the attention of medical men, diseases, especially those attended with fever, are so changeable in their nature, that the plan of cure is often necessarily changed, and the remedy which is beneficial at one time, may be improper a few hours after; and this often happens *solely* from the operation of the remedy; which requires to be qualified, altered in its dose, or totally omitted.

On the other hand, the *quack*, totally ignorant of the nature of diseases, or even of the operation of medicines; who never, or rarely, sees the patient, and if he did, is unqualified to judge of either; vends his medicine, accompanied with general directions,

tions; and without due cautions, concerning the circumstances under which its operation ought to be regulated, mitigated, or omitted.

If, even under the eye of the physician, remedies often produce unexpected and untoward effects; how much more frequently must this happen in the unguarded manner in which quack medicines are used.

But if the disease should be mistaken, as it may be by the most sagacious physician, it is either exasperated by an improper remedy, or that time is lost, which might have been more properly employed.

Upon the whole of what has been said, we may define a modern quack to be—a *pretender to knowledge of which he is not possessed; and a vender of nostrums, the powers of which he does not understand—in short, a swindler and a knave, in the worst sense of the word.**

The

* When physicians (I do not mean quack doctors) adopt extraordinary modes of obtruding themselves and their wonderful abilities on the notice of the public; it would be no breach of charity to place them on the same form with nostrum-mongers; and the similarity is more obvious, as, in both instances, the merits of the regular doctor and his brother quack are always much exaggerated; whilst that public, to which the appeal is made, is equally unqualified to judge of either. It is with regret, mingled with indignation, that I thus animadvert on the conduct of such of my brethren as have justly incurred this censure. In the preceding essay I took notice
of

The legislators in almost every civilized society have considered them as pests; and have therefore enacted penal laws for the suppression of quackery.

The colleges of physicians were instituted in different kingdoms of Europe, to examine all persons who undertook the practice of the art, and all drugs in the apothecaries shops, and destroy such as were unfit; and there can be no doubt but their power extended to the examination of nostrums; and

of their illiberal treatment of the Bath physicians; and it may fairly be presumed, that they are of the number of those, who, conscious of deficiency in personal merit, endeavour to compensate for that deficiency, by cultivating, most assiduously, the good graces of apothecaries, midwives, nurses, abigails, toad-eaters, and puffing gossips. But, not contented with this *indirect* attack on their brethren, they generally proceed to *direct* hostilities, and by the dark and malignant insinuations of themselves or their emissaries, endeavour to blast the reputations of all their competitors. This serious charge may, by some of my readers, be deemed incredible; but it is not less true. Such ungentlemanly arts may reasonably be considered as truly *empirical*, and those who practise them as *swindlers of reputation*; and therefore greater pests of society than *swindlers of property*; inasmuch as they, in a great degree, deprive the publick of the services and talents of *modest men*, who are generally as much their superiors in ability as in urbanity. That I may, in some degree, qualify the severity of this stricture, I take, with pleasure, this opportunity of declaring, that as I consider my profession as a most useful and respectable science, so I have a most sincere and affectionate attachment to all such of my brethren as discharge their duty with honour and integrity.

on their report, the venders were subject to severe penalties.

In the reign of James I. an order of council, grounded on a former law, was issued for the apprehension of all quacks, in order to their being examined by the censors of the college of physicians. On that occasion, several mountebanks, water-casters, ague charmers, and venders of nostrums, were fined, imprisoned, and banished.

This wholesome severity, it may be supposed, checked the evil for a time; but in the reign of William the third, it became again necessary to put the laws in force against these vermin; in consequence of which, many of them, when examined, confessed their utter ignorance, to such a degree, as to be unable either to read or write: others, it was found, had been attempting to procure abortion in unfortunate single women; several of them were discovered to be fortune-tellers, match-makers, panders, and bawds. Some of those miscreants were set in the pillory; some put on horse-back, their faces to the horse's tail, and their necks decorated with a collar of urinals,

nals, and afterwards whipped, branded, and banished.*

Having repeatedly smarted for a direct violation of the laws, they have endeavoured of late years to evade it, by availing themselves of a power vested in the crown of granting patents for useful inventions. This has, by the sordid avarice of the officers, been shamefully abused; for it may be clearly proved, that with respect to nostrum venders, few, if any, of their medicines could be deemed inventions, though they were obliged to annex an oath to their specifications. Of those which have been sold without the sanction of a patent (as well as those which have) it has been found, by chemical analysis, that the most powerful are dispensatory medicines, disguised by some trifling additions, whilst others have been found to consist of the most insignificant ingredients, as pith of bread, brick-dust, sheeps dung, &c. the venders depending for success

* A late news-paper informs us, that a person who believed his health had been injured by a quack, gave his doctor a sound drubbing, to the great amusement of the mob: it is to be hoped, however, that this mode of *feeing* will not become fashionable; otherwise it is probable that some, even of the regulars, might not always sleep in a sound skin.

on the strength of the patients' imagination, and the liveliness of their faith.

The impudent imposture of a German quack, who lately pretended to cure diseases by animal magnetism, induced the French king to issue an arret, which if duely obeyed, as it probably will be, must effectually suppress quackery in that kingdom: how far our ministers have acted wisely in imposing a tax on nostrums, instead of punishing the venders, may be doubted. The tax seems to be equally politick as a former gin act, which added to the revenue, whilst it sacrificed the morals and healths of the subject.

Were I to enumerate all the instances, within my own knowledge, of the dangerous and fatal effects of a misapplication of the most powerful of these nostrums, the detail would be almost incredible: a few instances may suffice.

James's Powder, though confessedly beneficial in certain stages of inflammatory diseases, has, not unfrequently, vomited, purged, or sweated to death, persons labouring under low, malignant, and putrid fevers, who

who might have been saved by a liberal use of bark, snake-root, and wine.*

The habit of taking *James's Analeptic Pills*, since bilious diseases have become *fashionable*, has irreparably injured many constitutions; by creating a necessity for the frequent use of purges, which, in most of the cases in which they are used, are not much less deleterious than the most virulent poisons.

Turlington's Drops, given imprudently in colics, have brought on fatal inflammation of the bowels and kidneys. How many unhappy infants have been lulled into fatal sleep by *Godfrey's Cordial*? and how many persons have been thrown into dangerous salivations by *Maredant's Drops*? The wife of a respectable magistrate of the city of London, and my particular friend, was destroyed by the consummate ignorance of *Meyerbach*; and there is reason to believe that the valuable life of the husband was shortened by the same means.

* The celebrated Dr. Goldsmith was destroyed by an injudicious use of *James's Powder*; and notwithstanding *James's* assertion, that it had been found beneficial in the malignant yellow fever of hot climates, the reverse is undoubtedly true.

With

With respect to testimonies in favour of nostrums, many are obtained by perjury, and others are exaggerated by ignorance; and whilst the supposed cures are published with much parade, the miscarriages are concealed with industrious care. That they may have been sometimes beneficial, it would be uncandid to deny; as a powerful remedy, producing, by the violence of its operation, a great and sudden change in the constitution, may either eradicate an inveterate disease, or subvert the powers of life: but I would submit to the serious consideration of my readers, whether, as regular practice is in possession of as powerful means as any nostrum whatever, it would not be more prudent to intrust the administration of them to those, who, by a liberal and regular education, are *alone* qualified to render them equally safe and efficacious; or if they must have quack remedies, let them be taken under the eye and regulation of a person of skill.

It has been alledged, that regular practitioners, by a timid routine, or selfish procrastination, deprive their patients of those
most

most powerful aids of which quacks have availed themselves. If this charge is, in any respect, well grounded, it is more applicable to the past than present times, as a more bold and decisive practice is now very generally adopted.

Some of the abettors of these quacks (for very few of them have been able to vindicate themselves) have insinuated, that though deficient in the general principles of physic, they have acquired by experience, not only a sufficient knowledge of the operation of their nostrums, but of the nature of the diseases to which they are adapted.

I answer, that the medical art resembles a circle, each point of which is so connected with the other, that in order to obtain an accurate knowledge of a part, the whole must be understood. And to shew the nature and extent of medical knowledge, and those branches of learning and science with which it has an intimate affinity, I shall here enumerate the qualifications necessary to form a skilful physician; and, upon a fair comparison, I may trust to the candour of my readers to determine, what portion of
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that knowledge can be justly claimed by the herd of nostrum-mongers.

The physician ought to be conversant with the *Greek* and *Latin* languages, because many valuable books are written in them; nor would an acquaintance with some of the modern languages be unnecessary.

A knowledge of *natural history* is indispensibly necessary, because our art constitutes a principal part of it, and the instruments or means he uses for the cure of diseases are also the objects of it.

Natural and Experimental Philosophy are intimately connected with medicine; especially whatever respects the state of our atmosphere, and its meteors; as the effects of the winds, of heat, cold, moisture, &c. either as the causes of disease, or the means of preserving or restoring health; and especially the late discoveries concerning the nature of the electric fluid, and factitious airs; and those branches of experimental philosophy which illustrate the principles of mechanics, pneumatics, hydrostatics, and hydraulics. Though the principles of *geometry* were improperly applied to the illustration
of

of medicine, by some physicians of the last century, yet a physician ought not to be ignorant of this noble science. *Logic*, being the art of sound reasoning, will very much assist him in his investigations. In short, there is no branch of knowledge, or accomplishment, necessary for compleating the education of a gentleman, which he ought not to possess.

The physician ought to be a man of genius, with a clear head, and a promptitude in quickly discerning the occasions when it may be necessary to depart from the common routine of practice, and avail himself of extraordinary expedients, in cases of urgency and danger: he ought to be firm, steady, intrepid, yet humane; and a man of the nicest honour and strictest probity, strongly impressed with a sense of the importance of his profession, and firmly determined to comply most religiously with his academical obligation, which requires him to discharge his duty with unremitting care, assiduity, and liberality.

These are only preliminary branches of knowledge and accomplishment. Those which

which are immediately connected with his profession are numerous and important. *Anatomy* informs him of the structure and connection of the organs of the human body;—*Physiology* instructs him in the nature of the functions or offices of those organs;—*Pathology* enables him to understand the nature and causes of the general symptoms or signs of diseases;—and *Nosology* teaches him the method of arranging those symptoms into classes, orders, genera, species, and varieties of diseases, and to establish their characteristic distinctions.*

He ought moreover to be well acquainted with the history of his art in all its branches, the progressive steps of its improvement, and the characters of the authors who have written on each subject; and in what respect, and by what discoveries, they have contributed to the advancement of the art.

But as the knowledge of all these branches of the science, though objects of philosophical contemplation, cannot be applied to

* The late Dr. de *Sauvage*, in a most elaborate work, has enumerated and described above two thousand diseases, including their complications and varieties.

any practical purpose, unless he is conversant with the means of curing diseases; the history of the *materia medica*, of which *Botany* is a *branch*, instructs him in the distinctive marks, and the general nature and qualities of those animal, vegetable, mineral, and metallic substances, which he is to employ in the cure of diseases.

Chemistry enables him to resolve those materials into their constituent principles, and to separate the essential and most active for the purposes of medicine.

Pharmacy, which is a branch of chemistry, teaches him the mode of uniting and compounding those materials, so as to increase their power and efficacy.

Dosology instructs him in the doses of his remedies, as accommodated to different ages and constitutions.

And, lastly; there is often so intimate a relation between external and internal diseases, their nature and causes; that the physician ought to be well acquainted with the principles of surgery.

I may now appeal to the good sense of my readers, and leave them to determine, how
many

many of the quacks they have known, or heard of, could be deemed thus qualified.

There is so intimate a connection between all those branches, that none of them can be dispensed with in the education of a physician; as I shall endeavour to shew by the following example, which I shall endeavour to make intelligible to every reader.

A person complains of a *difficulty of breathing*. To form a just judgment of the nature and causes of this symptom, the consulted physician must first avail himself of his *anatomical* knowledge of the structure of the lungs, and of the other organs which contribute to the function of breathing.

From *physiology* he learns the condition of the different organs necessary to a free, equal, and easy breathing, which afford the signs of a healthy state of the organs.

From *natural and experimental philosophy* he knows that certain qualities of the air are necessary for this purpose; and that a perversion of those qualities may be injurious to breathing.

Pathology instructs him that this symptom is connected with some affection of the lungs,
or

or other organs of breathing. But as he proceeds in his enquiries, the investigation becomes more intricate and perplexed; especially when he attempts to determine, to which of the many diseases of these organs this symptom belongs: whether, for instance, it is connected with different species of sore throat; whether it proceeds from some fault in the lungs themselves; and whether the affection is catarrhal, inflammatory, consumptive, asthmatic, rheumatic, gouty, &c.: or whether, these organs being in a sound state, the evil may not proceed from the air being too hot, cold, moist or dry; or impregnated with noxious vapours of lead, brimstone, and charcoal, &c.; or whether it may be connected with fever, or produced by various eruptions repelled from the surface, and thrown on those organs; as of miliary rash, itch, small-pox, measles, &c.; or, finally, whether, neither the organs nor the air being faulty, it may not proceed from blood or other humours floating in the cavity of the breast or belly; or from some diseases of the heart, liver, stomach and other organs, worms, &c.; the lungs being only affected
by

by sympathy or contiguity. If the case be still obscure, he endeavours to elucidate it by enquiring into the former state of the patient's health, his mode of life, the diseases he has been subject to, and his temperament or habit of body. From all these, compared with each other, he with the utmost caution, and by the strictest *analogical* reasoning, determines concerning the nature of the disease, its causes, and its degree; he forms his prognostic concerning the probable issue; and what will be the best means of averting farther danger, and promoting recovery. If he errs in any essential circumstance of enquiry or judgment, concerning the nature of the disease, every subsequent step must participate of the error.

Having formed his plan of cure, he runs over in his mind all the different classes of remedies, and from those selects such as he deems most proper; and ascertains the doses of them. He assiduously watches their effects from day to day, lessens or increases their doses, or even changes them as circumstances shall suggest. It often happens that, from their operation, he may acquire a more correct,

rect, or even a new idea of the nature of the disease; or a change of symptoms in the progress of it, may make a different mode of treatment necessary. Thus he proceeds, with extreme care and circumspection, until the disease terminates in recovery or death.*

This, out of a multitude of instances which might be adduced, is the most simple and intelligible I could select; and yet many essential and intricate circumstances are omitted.

Such of my readers as have perused the preceding pages with care will, I flatter myself, anticipate me in the inferences that I shall make.

1st, That the science of medicine requires extensive knowledge, and much sagacity.

2^{dly}, That from the multiplicity of diseases, and the difficulty of investigating their nature, even the most skilful may err; but that they, *and they only*, are qualified to correct their errors by nice observation, and accurate reasoning.

* It will not be necessary to apologize for this explanatory narrative; as the medical ladies are in the daily habit of hearing and detailing fictitious cases of *wonderful* maladies and *miraculous* cures.

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3^{dly}, That

3dly, That much danger may arise from unqualified persons undertaking the care of the sick; and that quacks, in general, *whether male or female*, are very deficient in medical knowledge.

4thly, That how effectual soever quack remedies may be; yet their being administered without a due knowledge of the disease, or attention to the effects of the remedies, may be attended with fatal consequences; and that if ever they relieve, it must be by chance.

But as it may be deemed an act of injustice to any man who claims the merit of an invention, to deprive him of the reward of his ingenuity, I would propose, that every person who has invented an useful remedy should, on oath, deliver the prescription to three members of the college appointed by Legislature, and that, after a fair trial of its efficacy, a reward be voted by parliament.

There is nothing novel in the proposition; as something similar was done in the case of Mrs. *Stevens's* medicine.

If such a regulation should be adopted, it would be necessary to suppress the nostrum-mongers, by enforcing, with vigour, all the laws

laws enacted for that purpose; and should the other regulations which I shall take notice of in the next chapter be carried into execution, I am firmly persuaded, that many of the most valuable members of the community, now annually lost, would be saved, to the great emolument of the nation.

C H A P. II.

L A D Y D O C T O R S*.

Mrs. HARDCASTLE.

Did I not prescribe for you every day, and weep while the receipt was operating?

TONY LUMPKIN.

Ecod! You had reason to weep, for you have been dosing me ever since I was born. I have gone through every receipt in the *Family Physician* ten times over; and you have thoughts of coursing me through *Quincy* next spring.

She stoops to Conquer, Act 2d.

I HAVE allotted a separate chapter to my very respectable sisters and coadjutors; as it would have been an unpardonable insult

* This term does not quite please me, because some of the other sex have also a strong propensity to quackery: however the proportion of female doctors being at least ten to one of the male, their claim to pre-eminence is indisputable.

to have put them on a level with the sordid and selfish race of nostrum-mongers; to whom I am persuaded they are very much superior in every liberal and *medical* accomplishment: though I am apprehensive, they may be *somewhat deficient* in those qualifications which would be necessary to their commencing physicians, if the branches of knowledge enumerated in the preceding chapter are indispensable, as they undoubtedly are.

Ladies (or gentlemen) doctors may be defined *sage* personages, who not only physic themselves; but, *without fee or reward*, prescribe, and often administer their remedies to their friends, dependants, and poor neighbours.†

I proceed to enquire how it has happened that the fair sex has arrogated to itself

† I have however known several *doctors* of this description, who were much more alert in prescribing, than in taking, *even* their own prescriptions: and I have generally concluded, that their confidence in their own skill suffered some abatement, when their personal safety was concerned. Human vanity is much gratified on every occasion wherein we can evince our superiority, with respect either to rank, opulence, or knowledge; and it must certainly be a very flattering circumstance for a lady-doctor to possess, or seem to possess, a degree of scientific knowledge by *six hours* hard medical study, the attainment of which costs a male duncie the labour of as many years.

the privilege of discharging the duties of the physician and surgeon.

As, by their domestic avocations, and the neatness, delicacy, and tenderness, peculiar to the sex, they have ever been well qualified to discharge the duty of nurses; so, from the habit of administering remedies, they at length assumed a right of prescribing them: The transition was easy and natural.

This laudable ambition of filling the first department of the medical art is of considerable antiquity; for we know that among our gothic ancestors, women were the chief physicians; and as female emulation is unbounded, they also claimed a place at the national councils; and even discharged the duties of the *corps diplomatique*, with singular address and success.†

† Besides the queen of Sheba, who was her own plenipotentiary to the *wisest* of kings; the result of whose royal *tête à tête* has been amply detailed; we have two other instances of female plenipo's; one to Charles the XIIth of Sweden, whose embassy failed, merely from want of gallantry and *politesse* in the iron-headed Monarch: But the lady, afterwards Duchess of Portsmouth, succeeded better with *our* Charles, and by her *very honourable* connection with that prince, had the pleasure of contributing greatly to the glory of the *Grand Monarque*. I am inclined to believe, however, that the ladies are *rather* better doctors than politicians, to which opinion I recollect two exceptions; our *Elizabeth*, and the *Thalestris* of the north.

How it happened that they gradually lost their *political* importance, history does not inform us; but it is certain that they have to this day retained their *medical* consequence.*

In those halcyon days, when men of rank and fortune spent the greatest part of their time at their country mansions, the mistress of the family necessarily commenced a *Lady Bountiful*; and not contented with the exercise of the chemical art in preparing her preserves and pickles, had recourse to her family receipts, *all of them infallible*; and from this invaluable store of knowledge, acquired the art of preparing plaisters, salves, and surfeit waters. These she dispensed with a liberal hand; and, with much condescension and humanity, visited the sick and lame; and not only distributed her remedies, but most charitably supplied all their wants.

About the middle of the last century, indigent men of some learning, published

* Though the ladies have lost much of their ostensible political consequence, their influence in the cabinet has not ceased; and from this petticoat influence a late race of our kings chiefly derived their embarrassments and misfortunes. In our line however, medical dunces have often been ushered to public notice and consequence by *female* intrigue.

medical treatises for the use of the *Lady Bountifuls* of that day; who, from *Aristotle's Master-piece*, *Culpepper's Midwifery*, *Salmon's Practice of Physic*, and *Every Man his own Physician*, made a very respectable addition to their stock of medical knowledge; and it is from the same inexhaustible funds, all our nostrum venders have borrowed their infallible remedies.

A revolution in the habits of life has now almost extinguished the race of the *Lady Bountifuls*; and the poor are now generally resigned to the care of those humane and tender-hearted gentlemen, the parish officers.

It would however be extremely unjust to insinuate, that the present age is deficient in charity; for the very reverse is the case; as is evident from the liberal subscriptions to hospitals and pauper dispensaries, and the readiness with which distressed individuals are relieved. The ladies also still retain their natural disposition to do good; and when they retire to their country seats, carry with them a medicine chest, generally the *refuse* of a druggist's shop; and from that magazine, not only physic the whole family,
but

but dispense their remedies to all the indigent neighbourhood.

Without presuming to arraign the motives for this act of charity, I would only observe, that in their mode of dispensing it, they fall short of their predecessors: for, instead of following the example of the quondam *Lady Bountifuls*, they generally take their report of the patient's case from an upper servant, to whom the administration of the remedy is intrusted; whilst the supply of nourishment ordered for the sick, is generally intercepted by the postilion or stable-boy, who is employed to deliver it.

As the *doctors*, of this description, are ready to assign various reasons for the exercise of their art, I shall consider and reply to them separately.

1st. They alledge, that, as they understand their own constitutions, they are best qualified to determine what is fit for them.

If, by a knowledge of constitution, the ladies mean that they have learned, from experience, what foods and drinks, and what modes of living, are most agreeable to their constitutions, I concur with them in some measure;

measure; though, as our constitutions change at different periods of life, and often in consequence of disease, it may happen, that what is suitable at one time, may be very improper at another; especially if the maxim be extended to the use of medicine.

2dly. They assert that, whether they prescribe for themselves, or for others, they deal in nothing but *simple* things; which, if they do no good, cannot do any harm.

I answer, that if the diseases for which they prescribe have a dangerous tendency, and there are few diseases which have not, delay creates danger; and it often happens, that, when means equal to the urgency of the case are omitted, the season for relief is irretrievably lost; and a slight disease frequently degenerates into a mortal malady.

In this way, I am convinced thousands of most valuable subjects are annually lost to the community; of which a great proportion die of that fatal English malady *consumption*. Instances of this kind occur daily to physicians, who have reason to lament that their efforts are unavailing, and their art discredited, in consequence of neglect or mismanagement

mismanagement in the earlier stages of disease; when there was a moral certainty of danger being prevented by proper management.

There is a considerable degree of inconvenience, often of danger, in persons being in the habit of taking even trivial remedies, for the removal of supposed complaints; I say *supposed*, because they often are so; and the very operation of those drugs may create so much disturbance in the constitution, as really to produce disease, instead of preventing or removing it. This is peculiarly the case with rhubarb, magnesia, Anderson's and James's analeptic pills, &c. the first dose creating a necessity for a second; and so on, until they become indispensibly necessary: Of the dangerous effects of this practice, I have given two instances in Essay I. to which I refer the reader.

A celebrated ancient physician* has cautioned us against the destructive practice of using preventive remedies; and I believe that our failure in the cure of diseases often

* *Celsus*—Cavendum ne præsidia adversæ valetudinis in secunda consumantur.

proceeds

proceeds from this practice ; the constitution being, by habitual use, rendered insensible to the impression of remedies, when they are really necessary.

If we are slightly indisposed, which is often the effect of luxurious indulgence, irregular hours, or both ; the safest means of relief is quiet and abstinence, which enable the constitution, by its innate powers, to obviate and remove the seeds of disease.

But in no respect is this preventive plan so absurdly and injuriously employed as with respect to infants, children, and young people ; and by this means many a tolerable constitution has been physicked into a state of irremediable weakness, infinitely worse than premature death.

3^{dly}. As an apology for the modern practice of keeping closet medicines, and amongst these an assortment of quack nostrums ; it is alledged, that, beside their not being able to trust to apothecaries remedies, which are often bad in their kind, the apothecaries' bills are exorbitant, and much enhanced by their selfish procrastination.

To

To these complicated charges, I reply; that the most creditable and conscientious apothecaries generally supply themselves with compound chemical medicines from Apothecaries-hall, and that it is likely that they would, for their own credit, procure better drugs than those usually sold as *closet* medicines; as they are certainly better judges than any person not of the profession.

With respect to the exorbitance of charges; as an apothecary is obliged to have a large assortment of medicines, many of which may never be used before they spoil; I am persuaded, that, though the charges are apparently high, their advantages are not on the whole greater, or so great, as those of retailing tradesmen. Respecting the last charge; I believe, that with regard to men of any credit or character, the insinuation is cruel and without foundation.

4thly. A reason assigned for persons of slender means having recourse to the use of quack remedies, is the high fees of physicians, and the insufficiency of apothecaries.

It is a delicate task for a physician to discuss the point with regard to the qualification

tion of apothecaries.* If their education be sufficient, physicians are *unnecessary*; but as the public does not yet entertain that opinion, any more than the apothecaries themselves, *a few self-sufficient men excepted*; it is much to be regretted, that the fees of physicians are so high, that few, excepting

* There is an old Latin proverb, which implies "that the cowl does not make the monk;" and I am sorry truth obliges me to declare, that it is so far applicable to our profession, that every man who assumes the title of M. D. has not, either by his education, skill, or conduct, any just claim to the distinction; whilst men under the denomination of surgeons and apothecaries may, by genius and education, be possessed of the abilities, without the credentials of a physician. Unhappily, however, for the community, the instances are rare, and it is still more unfortunate, that the public at large are not qualified to distinguish them from their ignorant and presuming brethren. I believe many of my brethren, as well as myself, have always been much gratified when they meet with men of this character; as they have, with that urbanity which becomes men of liberal education, been always disposed to consider them rather as respectable coadjutors, than as holding an inferior rank in the profession; and have sincerely regretted that they were so rarely to be met with; as they, as well as myself, must have found them candid, diffident, and totally free from a disposition to act disingenuously or illiberally; as is too often the case in every branch of the profession.

Whilst I am upon this subject, I would just observe, that the extra-licences granted by the London college, to country surgeons and apothecaries; and the honorary diplomas granted by the English and some Scotch Universities, to men who had not only *not studied* at them, but had not even seen them, are extremely derogatory to the credit of the profession; and very injurious, not only to those physicians who have obtained their degrees by residence and examination, but to the public at large: For though I am firmly persuaded, and even know, that some of those gentlemen, who come under the former description, are men of real merit, yet the mode in which they have obtained their degrees is certainly very irregular and improper.

people

people of opulence, can conveniently have *early* recourse to their assistance. The only expedient by which this evil can be remedied, would be to adopt the regulations established in most other parts of Europe, viz. to permit none but physicians to prescribe in medical cases, and surgeons in their department; that apothecaries be confined to their original employment of making up prescriptions;† and druggists and chemists be, under a severe penalty, prevented from vending drugs by retail; whilst the regulation of quackery on the plan laid down in the former chapter, would tend very much to place the practice of physick on a respectable and beneficial footing.

There are several reasons to be assigned for the fees of physicians being so high. Excepting a few of the class, who have really too much employment to do proper justice to

† The term *apothecary* is derived from a compound Greek verb which signifies to deposit; and the substantive implies a repository of drugs; so that apothecaries evidently deviate from their original destination, when they become *prescribers* instead of *dispensers* of drugs: However, according to the present constitution of physic, which stands in need of much reform, it would be impossible to limit them to their proper occupation, unless the fees of physicians were reduced.

their

their patients, the major part are rarely called in, until it is too late; and this rather to *save* appearances than with any great hope of *saving* the patient. Thus many years elapse, before the emoluments of his profession are more than sufficient to support a physician in the rank of a gentleman. If, in process of time his employment becomes extensive and profitable, he is willing to compensate for his former loss of time; and to endeavour to secure for himself a decent independency, and a provision for his family. But that the profession is *not* lucrative, is evident from the small number of physicians who acquire large fortunes.

A physician of London, now deservedly in great practice, assured me several years ago, that, with considerable business, many years had elapsed, before his annual income was equal to 800l.

This was, in some measure, to be attributed to a liberal plan he adopted of accommodating his fees to the abilities of his patients; insomuch that, on a fair calculation, partly from the smallness of the fee, never or rarely exceeding half-a-guinea, and
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his gratis visits, he did not receive more than half that sum on an average; and that taking one patient with another, he did not receive more than one guinea for the whole of his attendance during a fit of illness. This gentleman has since been amply rewarded for his humanity; and indeed, if we consider the time and labour many physicians bestow in attending hospitals, dispensaries, and other charitable institutions; and the many visits they make gratis, the profession will be found not to merit the imputation of avarice and rapacity: though, as among all other orders of men, there may be, and are, exceptions.

Fees ought certainly to be adapted to the abilities of the patients, and other circumstances; and a man of honour and probity will distinguish those circumstances wherein he ought to relax in the article of fees.

Men of fortune, high spirit, and great generosity, are very much disposed to gratify the physician in a manner, which, if his disposition be not sordid, he will not accept of; and yet it is very difficult to refuse on such an occasion without giving offence: on the
other

other hand, there are many, whose circumstances, when compared with their station in life, enable them to do that justice to the physician, which their narrow spirits incline them to deny him; such ought not to be spared; nor do men of this turn deserve to be treated with any degree of delicacy.— Many persons of a valetudinary habit have acquired such an unlucky bias of mind, as never to be satisfied without the attendance of the doctor, and a constant course of medicine: an honest man will discourage such a disposition, and avoid availing himself of this unhappy turn of mind.

Tender husbands, parents, or relations, to satisfy themselves that they have done their utmost, shall often solicit the attendance of the physician, though they know that all remedies must be ineffectual: here it would be as cruel to decline an attendance, which might give satisfaction to the miserable patient, or consolation to the afflicted relations, as it would be fordid to insist rigidly on the article of fees.

Persons who, with very limited incomes, are obliged to support a genteel appearance,

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(among whom, I heartily wish I were not obliged to rank a set of men truly respectable by their learning and function) may often want the assistance of a physician; though by no means able to gratify him in a manner corresponding to their inclination, or to established custom. Under such circumstances, a physician of a liberal turn of mind will fall upon such methods of accommodating his demands to the situation of his patients, as shall not hurt the delicacy of persons, whose feelings, and sense of honour, are generally in proportion to their education.

5thly. The Lady Doctors, since the publication of some popular medical books, proceed with more confidence in their private practice than their predecessors; as deeming those books sufficient guides in every case that can occur; and when they deign to consult a physician or apothecary, it is rather with an expectation of having their medical sagacity applauded, than their errors corrected.

When a physician hints his disapprobation of such publications, he is suspected of
sinister

sinister motives; and as medical men are supposed to be very averse from every attempt to remove the veil of mystery by which the art is supposed to be involved, I will, to avoid the imputation, faithfully detail the substance of a conversation held some years ago (the quotation excepted) and leave the reader to draw his own conclusions; and shall, for the sake of brevity, throw it into the form of dialogue.

Some years ago I was desired to visit a near relation of a gentleman of a very respectable character, and of profound erudition.

Having examined into the state of my patient's case, I was shewn into the library, and found on his table *Tissot's Avis au Peuple*, and *Buchan's Domestic Medicine*.

He joined me in a few minutes, and the following dialogue commenced:—

A. How is your patient, doctor, and what is her disease?

B. From the general symptoms, I am inclined to think there is some danger in the case; but the disease seems to be so complicated and obscure, that I have not yet been able to ascertain its causes, seat, or nature.

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A. The confession is ingenuous : are you always so explicit ?

B. Always, when I can rely on the good sense and candour of the persons concerned.

A. On perusing a book* published a few years ago, I was induced, on reading the introduction, to study medicine as a branch of philosophy ; and, if you cast your eye over my books, you will find a tolerable collection, all of which I have read with care ; but the knowledge they afford me has not inspired me with sufficient confidence to attempt the practice of the art, and therefore I requested your attendance here.

B. It gives me much pleasure to attend the family of a gentleman who is a judge of medical practice. Physicians, as the Rosicrucians of old, and alchemists and free-masons of latter days, have been accused of a wish to impress mankind with an opinion, that their art is mysterious and inscrutable to all but the initiated : but from this imputation I claim an exemption ; and in that respect, I have the honour of concurring

* Commentaries on the Principles and Practice of Medicine, by the Author,

with one of the greatest and best men who ever adorned our profession;† and in the publication to which you alluded, I have expressed my surprise and concern, that, intimately connected as medicine is with natural and experimental philosophy, so few men of learning have enquired into its principles as a science, unless with a view to practice it as an art. Men of general learning might, without much study or labour, acquire the leading principles of an art, in the improvement and support of which, they are in every relation of life so deeply interested.—

“ A private gentleman (says Dr. Gregory)
“ who has a literary turn, and chooses to
“ study medicine as a curious and interest-
“ ing branch of natural history, will find
“ the history of his own species a more in-
“ teresting subject, than the natural history
“ of spiders and cockle shells. To him such
“ a degree of knowledge only is necessary, as
“ may enable him to understand medical
“ books of merit, and to judge of the com-
“ parative merit of those men to whom he is

† The late Dr. Gregory, Professor of Medicine at Edinburgh.

“ to commit the important charge of his
“ own health, and the health of those whom
“ he is obliged by the ties of nature and hu-
“ manity to take care of. If such men were
“ to claim their right of enquiry into a sub-
“ ject that so nearly concerns them, the good
“ effects on medicine would soon appear.
“ They would have no separate interest from
“ that of the art: they would detect and
“ expose assuming ignorance, and be the
“ judges and patrons of modest merit.

“ Cases very often occur, where an inge-
“ nious physician sees his patient hastening
“ to certain death. He knows a remedy
“ that affords a probable prospect of saving
“ his life; but it is uncommon, not agree-
“ able to the established orthodox opinion,
“ and perhaps dangerous in its operation:
“ Here is a dreadful dilemma. If he gives
“ the remedy, and the patient dies, he is
“ utterly ruined. The *dunces*, who are the
“ most numerous in every profession, are al-
“ ways at war with genius, and watch its
“ miscarriages with an anxious and malig-
“ nant eye; all his prescriptions must re-
“ main on the apothecaries file, and rise up
in

“ in judgment against him, and upon any
“ miscarriage, the outcry is raised and pro-
“ pagated with the utmost malignity.

“ The only tame and believing patients
“ are *the men of sense*, who generally submit
“ to their physician, whoever he is, with
“ wonderful faith and patience; while all
“ the midwives, nurses, and old women, are
“ physicians; and the dignity of the most
“ stately of the profession is often obliged to
“ stoop to the folly and caprices of such
“ people, who are sometimes of more conse-
“ quence in making a physician's fortune
“ than all the merit he can possess.”

A. I well recollect the substance of the quotation from Dr. *Gregory's* introductory lecture; which I have read with much pleasure, and a sincere respect for the candour and liberality of that ingenious professor.

I have often been astonished to find men of learning and science, from ignorance of the knowledge necessary to form a skilful physician, commend, as miracles of medical skill, persons who in their conversation and manners evinced the ignorance and vulgarity of a groom. How can this be accounted for,

for, but by supposing that *even* men of erudition deemed learning and science to be totally detached from medical skill; and that bald experience was unconnected with medical principle? How therefore can we be surpris'd that empiricism is countenanced by all ranks, when the most discerning have formed so false an estimate of the healing art!

A. I have had repeated opportunities of making the same observation.

B. A moderate knowledge of medical principles would be of great use to the *clergy*, especially those who reside in the country. The middle and lower ranks of people are in general very averse to medical assistance; and very unsteady in the use of it: but a clergyman, when he knows that he is qualified to give his opinion, will make use of his influence to induce his parishioners to apply early for relief, and to persist in the use of proper means; which medical men, from a suspicion of their being interested, can rarely prevail on them to do. Some thousands of most valuable subjects are lost every year in this kingdom, by their
avarice,

avarice, their obstinacy, or their indigence. A country clergyman, thus qualified, will also be able to render very essential services to the parochial poor: he will, in some degree, be a judge of their diseases, and be able to determine when they want assistance; and what kind of necessaries the parish officers ought to supply them with, not only to assist the efficacy of remedies, but to promote recovery, and prevent relapse.

A. I sincerely wish that my brethren of the clergy would employ part of their leisure in the enquiries you recommend.

Just before you arrived I had been turning over two books now on the table, that I might endeavour to form a tolerable judgment of the nature of your patient's case; but have been disappointed: nor am I surprised to find I have been so, after the frank declaration you have made. What is your opinion of compilations on this plan?

B. You have assigned me an invidious task, which I wish to decline. *Tiffot's* work might be of some use in the mountains of Switzerland, where medical assistance of any kind is rarely to be met with; but I doubt whether

whether the other was so necessary in a country where medical men abound.

A. As you decline being more explicit, I will venture to give you my opinion.

These compilations are either sufficient guides, with respect to the treatment of every disease which occurs, or they are not. If they are, the medical art is comprised within a much smaller compass than I conceived, or indeed have found it to be, on perusing some of the best books in every branch of the science: and so far as respects the study of it as a science, I may, without presumption, hold myself to be a tolerable judge.

If Dr. *Buchan's* compilation is sufficient to enable an ordinary reader, male or female, to commence physician, the many years of study and application, deemed hitherto to be indispensibly necessary to the education of a physician, must have been totally misapplied; and Dr. *Buchan*, and the rest of his brethren who adopt his sentiments, if any such there are, ought, if they are honest men, to resign their claims to practice, in favour, *I will not say of apothecaries*, but of every old woman who has abilities and patience

ence sufficient to *spell* the book. If these works are not sufficient guides, and I did not require the present case as an evidence that they are not, I will venture to pronounce such publications to be very injurious; because they have a manifest tendency to encourage a dangerous species of empiricism, now very prevalent; by inspiring a confidence of skill and ability which they cannot impart, and the author is therefore responsible for all the consequences.*

B. Ignorance and presumption are generally concomitant; and I believe, that men of the first abilities in the profession, in proportion to the extension of their practice, their experimental conviction of the manifold difficulties which attend the investiga-

* It is with reluctance that I detail these genuine strictures on the publication of a brother fellow of the same college; who, I believe, is a very respectable physician—but *Amicus Plato, sed magis Amica veritas*.—I am however persuaded that *The Domestic Medicine* is a good compilation of modern practice; but addressed to persons in whose hands it becomes a dangerous edged-tool. The only good purpose it is likely to answer is, being a tolerable memorandum-book for apothecaries.

A very ingenious clergyman of my acquaintance tells me, that being an invalid, he some time ago read a part of Dr. *Buchan's* book, and finding himself strongly impressed with an idea that he suffered under each successive disease, as he proceeded, he thrust the book into the fire, and with the *Domestic Medicine* dismissed his imaginary maladies.

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tion of diseases, and the mortifying disappointments they meet with in their attempts to remove them, become daily more cautious and diffident, whilst those who have only *caught the eel of science by the tail*, happily conceive they have no difficulties to encounter.

This self-sufficiency is often, and indeed generally, the result of a false and erroneous analogy. If a lady doctor hears of a case in which a particular remedy has been successful, she uses and recommends it on the faith of an ignorant relator in every case which is supposed to be similar, though it is more than probable that there is really no similarity: or she consults the *Domestic Medicine*; and having compared the doctor's description of the disease with the patient's symptoms, prescribes with great confidence. It may however, unhappily for the poor patient, happen, that in consequence of some *small mistake* in analogy, the prescription fails, much time is lost, and the physician or apothecary is called in to rectify the consequences of delay or mismanagement, which is not always in his power.

Physicians

Physicians know, and often from painful experience, that such is the diversity of aspect which diseases assume, not only from difference of constitution, but in the various stages of their progress, and even from the untoward operation of medicines, that no general description of diseases, or rules of practice, which can be derived from books, will avail; but that, with all the assistance which strict analogical reasoning, grounded on extensive experience, can afford them, they sometimes err in ascertaining the nature of the disease, and therefore necessarily in applying the means of relief.

In such a dilemma, however, it will not be denied that they are better qualified to discern and rectify the error, than any of the *élèves* of Dr. *Buchan's* school.

A. I heartily accord with you.

I shall conclude this chapter, by expressing my wishes, that the arguments I have urged, from the most disinterested motives, may make a proper impression on my fair readers; and I do most earnestly recommend to their consideration,

consideration, whether, in those instances, where they venture to perform the duties and offices of the physician, *they are not in danger of incurring a breach of the sixth commandment.*

A P P E N D I X.

*A TABLE of the relative Digestibility of
several Articles of Food.*

A N I M A L S.

<i>A. Wild.</i> Venison Hare Red Game Woodcock Snipe Pheasant Partridge Quail Teal Pigeon Wild Duck Tame Duck Goose	<i>C. Salted Meats.</i> Salted Beef Mutton Ham Beef Ham Tongue Bear Ham Pork Ham <i>D. Young Meats.</i> Kid Chicken Lamb Veal Pig Eggs	Butter <i>F. Shell Fish.</i> Lobster Shrimp Crab Oyster
<i>B. Tame.</i> Mutton Beef Rabbit Goat Pork Turkey Capon Hen Cock	<i>E. Milks.</i> Rennet Whey Human Ass's Mare's Butter Milk Cow's Sheep and Goat's Cream	<i>G. Scaly Fish.</i> Whiting Haddock Mackarel Sole Flounder Cod Pike Perch Dory Piper Herring Brill Turbot Salmon Eel Turtle Sturgeon

VEGETABLES.

<i>H. Fruits.</i>	Preserves with	Rye
Strawberry	Sugar	Oats
Raspberry	Pastry	Wheat
Currant		<i>M. Pulse.</i>
Grape	<i>K. Esculent Veget-</i>	French Beans
Cherry	<i>ables.</i>	Pease
Gooseberry	Asparagus	Beans
Nectarine	Artichoke	
Peach	Skirret	<i>N. Sallads.</i>
Apricot	Turnip	Cress
Pear	Carrot	Celeri
Apple	Parsnip	Lettuce
Melon	Pumpkin	Endive
Plumb	Potatoe	Cucumbers
Nuts	Spinach	
	Brocoli	<i>O. Pot-Herbs.</i>
<i>I. Dried Fruits.</i>	Cauliflower	Parsley
Prune	Colewort	Thyme
Currant	Cabbage	Leek
Raisin		Chive
Fig	<i>L. Grains.</i>	Onion
Preserves with	Rice	Shalot
Brandy	Barley	Garlick

CONDIMENTS.

Sugar	Horseradish	Pimento
Salt	Mustard	and
Vinegar	Cayenne Pepper	other Spices

Remarks

Remarks on the preceding Table.

THIS Table is perhaps more an object of curiosity than of utility; it may, however, amuse such of my readers as are solicitous about the qualities of their foods.

Though the arrangement in the different sections of the table is tolerably exact, yet we often meet with such constitutional peculiarities, owing probably to the state of the nerves of the stomach, as to render some foods, which in their nature are not very digestible, very easy of digestion to particular persons, and the reverse.

In each section of the table the most digestible article is placed at the top, the least so at the bottom: Thus in section A, venison is the easiest, and goose the most difficult of digestion, of that section only; for it is not my intention to compare the articles in different sections with each other, *e. g.* venison with turbot, or pork with sturgeon, as it would swell this appendix into a volume, without affording any equally useful information.

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Before

Before I proceed to my remarks on the particular sections, a few general observations will be necessary.

Sanctorius, an Italian physician of the last century, made a variety of experiments by means of a statical chair, in which, after having previously weighed his meats and drinks, he weighed himself at different periods of the day, in order to ascertain the proportion between the grosser discharges, and insensible perspiration.

He found, that, under the use of some foods, perspiration bore a greater proportion to the other discharges; and those foods, he therefore said, were more *perspirable*. I shall adopt the term, without applying it precisely in the same sense.

By *perspirable*, in the following remarks, I mean a disposition in foods, after being converted into nourishment, to pass out of the body, not only by perspiration, but by the other discharges: hence, when I say, that one food is more perspirable than another, I mean that, having performed the office of nutrition more expeditiously, it is sooner discharged, as an useless feculency. There are
some

some other terms which remain to be explained.

Alcalescency is a state opposite to acidity, and so far of the nature of putrescency, that the latter is always accompanied with, and often preceded by the former.

Putrefaction is the dissolution of animal and vegetable bodies, by a decomposition and depravation of their constituent principles, manifested by offensive vapours discharged from them in that state.

Stimulant means whatever spurs on, or excites to stronger action or exertion, an animated body or organ, when in a *proper* state to receive the impression. I say *proper*, for when our bodies are diseased, the organs may be too susceptible, and therefore violently stimulated *even* by slight causes, as in many nervous diseases; or not at all susceptible, as in palsies; and between these extremes, there are various intermediate degrees both of health and disease: and on these gradations, difference of constitution, habit, or temperament, chiefly depends.

When we say that animal food stimulates more than vegetable, we mean, that it urges

the stomach and other organs to stronger exertions, and produces a temporary artificial fever; and thereby imposes greater labour on the organs thus affected.

Sedative is the reverse of *stimulant*, being a certain impression made on a sensible organ, by which its sensibility or susceptibility, and also its power of exertion, are lessened. Thus we say that wine is stimulant, and vinegar sedative, in consequence of their different impressions on the nerves of the stomach, and through them on the rest of the body. For the stomach is, as it were, the centinel of the system; and by an exquisite sympathy, imparts to, and shares in, the manifold agreeable and distressful sensations both of the body and mind,

There is sometimes a connection between perspirability and digestibility of the food; for the sooner the nutriment of any particular meal is expended and discharged, the sooner there is a demand for another supply, indicated by the sensation of hunger, and the reverse:—a wise provision of nature to guard against dangerous repletion on one hand, or emptiness on the other.

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We may divide all foods into vegetable and animal. With respect to the relative digestibility of these classes, the following propositions may be admitted.

1st. *Animal food* being, before it is received into the stomach, congenial in its nature with the solids and fluids of our bodies, requires very little farther preparation, except being dissolved by the digestive powers.

Roasted meats are more digestible than boiled, because boiling extracts the juices, and leaves the fibrous parts more difficult of solution.

The lean of fat meat is more digestible than that of lean meat, because the oily particles, when incorporated with the mucilage, renders the juices more perfect and alcalescent.

2dly. The more *alcalescent* the food is, it is the more digestible, because the more perspirable; therefore the articles under section A are more digestible than those of B, and both very much more so than those of D; as this contains a much larger proportion of mucilage, which, of all the principles of nourishment, is the most difficult to be subdued

by the digestive powers, and in nature approaches more nearly to the vegetable grains and nuts.

Under the sections F and G, there are several articles, which, being alcalescent and easily soluble, may be classed with sections A and B; whilst others are perhaps nearly as indigestible as the younger animals, though considerably more alcalescent.

I have already hinted my opinion concerning the digestibility of salted meats. The salt, and sometimes the sugar, with which they are pickled, dissolves the animal mucus, and the salt of *powdered* meats increases their disposition to solubility in the stomach. But there is another cause of their digestibility; which is, their grateful stimulus on the nerves of the stomach. Salted meats are supposed to generate scurvy, and other acrimonies in the blood; but though the sea-salt in salted meats, when long kept, may degenerate into an ammoniacal salt, and thereby dispose to putrefcency, or any other acrimony; I am persuaded sound salted meats contribute very little, if at all, to the production of sea scurvy.

Sect.

Sect. E. *Milk* may be considered as consisting of oil, sugar, a coagulable part or curd, and a very considerable portion of water: it is immediately separated from the chyle, and has so little disposition to an animal nature, that it readily becomes four: there is reason to believe, that it always undergoes a decomposition in the stomach.

Whey, which consists of oil, sugar, and the watery part intimately blended, is preferable as a nourishment to milk, as it is divested of the curd.

Butter-milk, not only on account of its acescency, but as having but a small portion of curd which is broken down by the churn, is, as well as whey, very digestible, cooling, and sedative, and therefore an excellent food in hectic fevers.

Milk boiled, and sugar or salt added, is more digestible than when raw. The grosser milks contain the greatest proportion of curd, and are therefore the least digestible. I very much doubt the propriety of prescribing ass's milk to invalids; for even in hectic cases, whey or butter-milk are much preferable.

As

As oil, or butter, which is an animal oil, constitutes a very considerable part of nourishment, both animal and vegetable, it is not to be conceived that a moderate proportion of either in our foods can be so inimical to our bodies as has been generally imagined; especially as that oil is deposited in the fatty cells of the body, for very important purposes of the animal œconomy.

From some experiments made on purpose, we find that butter and mucilage, whether animal or vegetable, incorporate readily, and thereby break the tenacity of the particles of both: salt promotes their union, and it is not improbable that a similar change takes place in the stomach.

Vegetable food. All vegetables, fit for nourishment, ought to be mild, bland, and agreeable to the taste; and though we admit some articles of an acrid nature, as celery and endive, to our tables, they can scarcely be considered as foods. Vegetable aliment, being very remote from an animal nature, is therefore on the whole more difficultly assimilated to the nature of chyle and blood: but though it is not so soluble in the stomach

as

as animal food, yet the juices of many of the pulpy and sweet vegetables are very easily extracted, and are therefore more perspirable than animal food.

When the stomach is weak, the dried fruits are less flatulent than the fresh; both kinds are however acescent; to qualify which, those preserved with brandy may sometimes be used.

Sect. K. The esculent vegetables are some of them very easy, and others more difficult of digestion. Some of them are alcalescent, but none of them powerfully so.

Sect. L, M. The grains and pulse contain, of all vegetables, the most permanent nourishment, and in the greatest proportion. Their nutritive particles consist of sugar, oil, and mucilage, intimately combined and incorporated in their mature state. That sugar constitutes a considerable part of this compound, is evident from the sweetness of all the grains before they ripen, and before the mucilage is closely united with it. Sugar also abounds in many of the fruits.

The glutinous texture of the grains makes them very difficult of solution and assimilation in the stomach.

Their

Their digestibility and perspirability however are much increased, either by fermentation when made into bread, or by the addition of butter and sugar, or salt, which, assisted by heat, break the tenacity of their particles: Hence it is that puddings are very digestible; and even pastry, if the butter be good, the quantity not too great, and the oven not overheated, is not so indigestible a food as is commonly imagined.

As fermented bread is disposed to run into the ascescent fermentation; *biscuit*, as I observed before, is preferable for invalids.

Vegetables being more apt to run into a strong vinous fermentation than animal food, owing to their glutinous texture, they often swell the stomach to a violent degree, by throwing off a vast quantity of elastic air; and there is reason to believe, that some persons, guilty of gluttonous excess, have been suddenly destroyed by it, though they died apparently apoplectic: but, at any rate, the stomach is much hurt by the sudden distension, especially in invalids.

When this effervescence subsides in weak stomachs, the next change is generally into a
pungent

pungent acid; and though such an acid sometimes prevails in health, from excess; yet it only terminates in a fit of colic, and discharge of the offending contents; whereas in invalids it not only weakens the stomach by its sedative power, but when it descends into the intestines, the bile, which, in health neutralizes it, being deficient and weak, cannot correct it, and the evil is perpetuated through every subsequent stage.

Vegetable food is not only necessary to man as a qualifier of animal food; but, as a certain degree of fulness and tension of the coats of the stomach is necessary for perfect digestion, a portion of vegetable food is properly added to give bulk rather than much nourishment; and that the food may not pass out of the stomach before it is properly assimilated and mixed, solid foods are more proper than liquids for this purpose, because they require some time for solution.

If we compare animal with vegetable nourishment, we shall find that the former produces a firm, dense, rich blood, which gives greater tension to the vessels, and more vigour and elasticity to the fibres; whereas
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the nutrition of vegetables, besides being less in proportion to their bulk, produces a thin, weak, watery state of the blood; renders the fibres less firm, the muscles less vigorous, and the circulation more slow and languid; so that animal food is relatively stimulant, and vegetable relatively sedative.

SECT. N. *Sallads* can scarcely be deemed foods, as they contain very little nourishment; but as they are possessed of a sedative power in a small degree, insomuch that some persons are of opinion that lettuce disposes to sleep, they may be used as a light meal by those who are in the habit of using supper; a habit which ought never to be discouraged, especially in invalids; because it induces them to divide their meals more properly.

Cucumbers are very cold and difficult of digestion, and are therefore qualified with pepper; but they are rarely to be used by persons who have weak stomachs. It is remarkable, that almost all nations have concurred in joining oil, or butter and vinegar, with this kind of food, perhaps from experience of their checking its disposition to ferment and become flatulent.

Beside

Beside the cucumber and mushroom, which is often poisonous, there are two other species of the fungous vegetables, the morell and tuffle; but they are more articles of luxury than of food; and therefore I have not given them a place in the table; and I confess I am ignorant of their properties.

Sect. O. *Pot-Herbs.* Except the first article, all these are of the stimulating kind: those of the onion kind seem to have a slight degree of soporific power, as they dispose those who eat them to be heavy and drowsy. They are not an improper addition to vegetable food; and as they are warm, they may be of use in exciting the nerves of the stomach when languid, and in promoting digestion. They are so far connected with the articles of the next class, as to be deemed *condiments*.

CONDIMENTS.

Sugar is not merely a condiment, but has by some chemists been deemed the chief principle of nourishment. In the countries where the sugar-cane is cultivated, it is found to be exceedingly nutritive; though,
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on account of its acid, it is supposed to be injurious to the teeth. Sugar, when unrefined, has a strong disposition to ferment, though, perhaps, not so much so as honey, which is a peculiar species of liquid sugar. Refined sugar is a fitter article of condiment for those who have weak and sour stomachs, as less apt to ferment, especially when qualified by cream or butter. Sugar is a resister of putrefaction, and therefore often combined with salt in preserving meats: it is certain that, since it has come into general use, putrid fevers have become much less frequent in this kingdom.

Salt, Though used to preserve meats from putrefaction, which, when employed in a large proportion, it does in some degree; yet, in the moderate degree in which we use it at our tables, it promotes, instead of resisting, putrefaction; and is therefore an useful condiment in weak stomachs, not only as it gently and gratefully simulates the nerves of the stomach, but favours the solution of the food, dissolves the tough phlegm, promotes its mixture with the oily parts of the food, and corrects acidity. It ought to be used
very

very sparingly by young, florid, and hale people, as it heats and creates thirst; but it is, for the reasons already assigned, a very useful addition to vegetable food: Hence it is, that black cattle and sheep are very fond of it, as it increases the solubility of their food.

Vinegar, as being the product of an imperfect fermentation, does not promote acidity so much as the vegetable acids of lime, lemon, &c. and is therefore not an improper sauce for fish, or for our meats when long kept and highly alcalescent, with a putrid tendency. It ought to be used sparingly by invalids, whose stomachs generate a sour leaven. The French use vinegar much more than we do, and indeed theirs is much more genuine; ours being often adulterated with oil of vitriol.

Spices. The mustard and horseradish are more congenial to cold climates and vigorous constitutions, because less stimulating and inflammatory than the aromatic spices; which, being the produce of hot climates, are better adapted for the vegetable foods, and languid enervated stomachs of the natives, or of those

those strangers who have long resided there. Those spices contain a large portion of very hot essential oil; the stimulus of which is very permanent, and the oil much less perspirable than that of mustard, horseradish, and cayenne pepper, which passes off readily by the skin and kidneys. It is evident, therefore, that how useful soever they may be in languid and debilitated constitutions, they are very improper for young persons, and those of a sanguine habit.

From what has been said in the preceding pages, the following inferences may, I think, be fairly deduced.

1st. That though nature has destined infancy to the use of milk, the milk of the mother is much better adapted to this purpose than milks of other animals; which, if the infant is weakly, are much less digestible than broths of the foods under Sect. B. F. and G. which being *alcalescent*, correct the mucous and acid juices of the stomach. That flour pap is a very improper food for infants, on account of its glutinous indigestible nature; and that pap made of fermented

mented bread and cow's milk, is almost equally objectionable.

2dly. That though, when children, after they are weaned, are hale, strong, and active, it is not very material what their diet is; yet a small proportion of animal food will be of use in preventing the accumulation of that mucus which breeds worms: but if they are puny and sickly, a greater proportion of animal food is necessary.

3dly. That young, full, and florid persons, who do not exercise much daily, may use the foods under Sect. D, in preference to the old or wild animals, because they are less alcalescent and stimulating; but that the chief part of their food ought to be vegetable, as less nutritive and heating: wines and spirits to be avoided.

4thly. That from the 30th to the 55th year, persons who enjoy good health need no selection of foods, provided they are temperate in their meals, and use sufficient exercise to promote the perspirability of their animal food; and temper it with a due proportion of vegetables, to prevent excess of alcalescency, to which the animal fluids have

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a dispo-

a disposition at this period: such persons ought to use the stimulating pot-herbs and spices very sparingly: if they use wines, they ought to be light and thin.

5thly. That from the fifty-fifth year upwards, the more digestible and perspirable foods are preferable; because at this period the appetite becomes less keen, and the springs of life more feeble and languid: to such persons the strong wines are preferable, and a moderate use of spices, &c. is beneficial.

6thly. That as animal food generates a strong rich blood, and therefore affords a more invigorating nourishment, persons who follow laborious employments require a large proportion of animal food of the most nutritive kind; and a moderate use of the least perspirable drinks, as ale, the strong beers, and sweet wines; but rich and heating fauces are very improper.

7thly. That the sedentary and studious, who prefer the enjoyment of a clear understanding, and a serene mind, to robust health, must be very sparing in the use of animal food and strong drink; though a moderate
use

use of the spices may qualify the vegetable part of their foods; but as many of the persons who come under this description are, by their mode of life, subject to flatulence and indigestion, the regimen prescribed under the next head must be adopted, and study and indolence exchanged for dissipation and exercise. Sedentary women are very apt to fall into this state.

8thly. That as many flow diseases originate from, or are connected with, weakness of the digestive organs, a deficiency of the bile, both in quantity and pungency, and a crude acescent state of the other digestive humours; it becomes necessary to correct this fault of the digestion as a primary evil. Medicine alone will not effect this, without a corresponding regulation of diet. We are led, not only by the nature of the remedies which are most beneficial in these cases, but by experience to prescribe the diet best adapted to this purpose. As there is a predominant sharp acid, vegetables ought to be used very sparingly; for though some of them are mildly alcalescent, especially the three first, and the five last of Sect. K, yet

as they part with a large quantity of elastic air, and become acid by fermentation, they are not much preferable to the others: coarse ship biscuit is perhaps preferable to any other vegetable food in these cases.

Of the animal foods, the most alcalescent and perspirable, as those under Sect. A and B, are to be preferred; and to these we may add several of the articles under F and G; always using a considerable portion of salt with them, as it assists their solution and putrescency. For the same reason, salted meats, in a moderate degree, ought not only not to be forbidden, but even recommended; as, by their grateful stimulus in the stomach, they very much promote digestion. Their supposed tendency to produce scurvy and other acrimonies, which is only applicable, if at all, to a long continued use of tainted salt meats, can afford no just objection to a moderate and occasional use of sound salted meats. It is obvious that the articles under Sect. D ought to be used sparingly, as well as those fishes which are very gelatinous; because they are not only difficult of digestion, but are very apt to fall into the acedcent

cent fermentation. For the same reason jellies of calves feet, &c. and those foods which contain much vegetable mucilage, as sago, chocolate, &c. rarely agree with the stomachs of such invalids.*

I have already assigned my reasons why a moderate use of butter coincides with this regimen.

It has been objected to this plan of diet, that as such patients are often subject to irregular fevers, such a stimulating diet is improper, as it may exasperate the feverish symptoms: but unless such a feverish indisposition is really *hectic*, owing to the inflammation or imposthumation of some organ, (in which case such a diet would be exceedingly improper) the objection is not well grounded. For we know that agues have resisted the most powerful remedies, until they were assisted by a generous diet; and that in low fevers, commonly called nervous,

* People in general, and even many of the profession, make a very erroneous estimate of the relative digestibility of foods: how often is the miserable *hectic* patient crammed with jellies, gluey slops, and rich broths, which exasperate the fever, and oppress the decayed lungs! There seems to be a *fashion* in the *diet* of the sick as well as in their *diseases*: a late fashionable physician invented beef-tea; and another having prescribed oysters and porter to a lady of rank, oysters and porter became quite the *ton*.

and

and which are not unlike the irregular fevers now under consideration, animal broths and wine have assisted the enfeebled constitution to bring the fever to a favourable crisis.

It has also been alledged by those who insist on the advantages of low diet in diseases, that almost all the different species of chronic diseases have been cured occasionally by a spare vegetable diet.

Physicians have very often reason to regret that the state of the digestive organs, and other circumstances, should render a vegetable plan of diet improper or unsafe; because the general nature of the disease often indicates a decided preference of milk and vegetable diet; which is moreover preferable, as it imposes less labour on the circulating and secretory organs: this is peculiarly the case in certain stages of gout, and also in several diseases connected with visceral obstructions, and a depraved state of the sensibility of certain organs.

In regulating the diet of the sick, we ought to attend peculiarly to the state of the stomach and bowels. Many diseases depend *solely* on a depraved state of those organs; as
many

many of those Proteus-like affections, which are commonly called nervous, hypochondriacal, and bilious; and gout almost always; and therefore unless the tone and vigour of those organs be restored by appropriate diet and medicine, we shall fail in our attempts to relieve the patient. In such cases, foods that by acting gratefully on the nerves of the stomach, become easily digestible, of whatever class or kind they are, ought undoubtedly to be preferred; and in all cases wherein the digestive organs and the general constitution will bear a vegetable diet, it ought, as I have observed under Essay III. chap. ii. sect. 3. certainly to be adopted, as the best means of effecting a radical cure.

I have already observed, that a moderate use of such fermented liquors as are not disposed to turn sour on the stomach, coincides with this regimen: but rum or brandy diluted are generally preferable to the fermented drinks, as they check fermentation.

If we compare animal and vegetable foods with respect to their relative *digestibility* and *perspirability*, the following inferences may probably be deduced.

With

With respect to *digestibility*, animal food admits of a more entire solution of its substance, as consisting almost entirely of nutritious parts; whereas many of the vegetable foods, being of a firmer texture, rather yield their nutritive juices by extraction, than by a solution of the whole substance. With respect to the degree of their stimulus on the nerves of the stomach, that of animal foods is much greater, owing to their being more sapid and alcalescent; and therefore whilst digestion is going on, they produce a temporary fever in consequence of their stimulus being communicated through the stomach to the heart and circulation. Animal foods, moreover, impress the stomach with a sensation of satiety, opposite to that of hunger, for some hours after a meal; and hence it is that few persons can digest more than one full meal of animal food in a day. But after a meal of vegetable food, there is no *digestive* fever, because it is chiefly acescent and sedative; and, *in health*, the sensation of hunger returns more frequently.

With regard to *perspirability*, as animal food affords, in proportion to bulk, a much larger

larger share of rich nourishment than vegetables, and requires more labour of the constitutional powers to prepare it for the ultimate office of nutrition; it is therefore not so soon expended and discharged from the body as vegetables. It is for this reason that in *high* fevers, and in other diseases, where stimulus may be injurious, the patient generally has an aversion to animal foods, and covets vegetables; and, indeed, there are few diseases in which, if the state of the stomach will admit of it, they are not preferable; because they require less constitutional effort in every stage of preparation, nutrition, and discharge from the body; and therefore, with perhaps a few exceptions, they may be deemed more perspirable than animal foods. Hence we may venture to assign a reason why gout and other inveterate diseases are only to be eradicated by a milk and vegetable diet; because as they are generally the effects of the constitution being overcharged and overstrained, and consequently very much weakened by a luxurious excess in the use of animal foods and strong drinks, so a steady diet of an opposite nature,

ture, will afford the best means of restoring them to their wonted energy.

With respect to obstinate nervous complaints, we know that they are also, in many instances, produced by luxurious excess; and therefore, as in gouty cases, where the constitution could bear it, a vegetable and milk diet has been of great use.

Experience also has taught us, that when the structure and functions of the principal organs, as the lungs, liver, spleen, and other bowels, have been essentially injured and depraved by stimulating diet, a vegetable course of diet has at least retarded the fatal period, and has sometimes effected a complete cure:

And lastly, with regard to the variety of leprous and other inveterate diseases of the skin, which are supposed to proceed from sharp and foul humours, we know that the rich, dense, and alcalescent blood which animal food produces, is more likely to clog and foul the secretory strainers, and either to generate or exasperate those diseases.

I shall

I shall conclude these remarks by observing, that they are not intended for the information of medical men; but only of such of my *unmedical* readers as are solicitous about the observance of dietetic rules; those especially who, by delicacy of constitution, approach the state of invalids. As I formed the design of the appendix after the other parts of the work were printed off, the reader will, I hope, pardon such repetitions of my former observations on diet, as were unavoidably necessary to give my remarks on the table a proper connection: and as I wished to make this work as complete as possible, I have chosen rather to incur the imputation of being redundant than deficient.

I shall conclude this appendix by re-
marking that they are intended for the
information of medical men; but only of
such of my countrymen as are not
ignorant about the abstinence of diet; and
those especially who, by delicacy of consti-
tution, approach the state of invalids. And
I formed the design of the appendix, after the
other part of the work was printed off, the
reader will I hope find such expressions
of my former observations that, as were
undoubtedly necessary to give me reasons
on the table a proper connection; and as I
without remark this work as complete as
possible, I have chosen rather to insert the
impression of being redundant than the
want of any necessary part.



CORRECTIONS and ADDITIONS.

SINCE the body of the work has been printed off, the author has discovered some inaccuracies and omissions, which, in order that the sense of the corresponding paragraphs may be more compleat, the reader is requested to insert with a pen in the margin.—There are also occasionally subjoined some corrections of errors, owing perhaps more to the inattention of the author than of the printer.

Page 18, line before the last, read King's-Bath Pump, drank daily.

* 23, l. 5, r. and other bitters in such cases.

—, l. 6, r. to the bile.

—, l. the last, r. finds in the bile a more convenient subject of blame.

24, l. 8, *for increase*, r. increasing.

—, l. 9, r. and not such as may discharge &c.

32, l. 7, r. immediately succeed those of heat.

35, *note*, l. 10, *dele* not only.

42, l. 4, *from the bottom*, r. as that is.

44, *after the second sentence.* From some experiments made (if I recollect aright, by Dr. *Lettſom*) on the atmospheric vapours of London, collected and condensed, it was found to contain such a proportion of noxious impregnations, as might reasonably be supposed to be a great source of the putrid fevers which are prevalent in that great city; and as all cities and towns are, in proportion to their extent, productive of similar exhalations, this is one reason why cities are more subject to epidemic diseases than the country; and from the bills of mortality, the proportion of deaths is often one-fourth or one-third greater in the former than in the latter. But if to this general cause we

add

add the effects of hot and crowded rooms, in which some fashionable persons pass some hours almost every night, the injurious effects must be very great.

Page 46, at the end of the last sentence. But without altering the construction of the sash, the heat of the parlour or dining-room may be safely moderated, and the air corrected, by raising a part of the sash most distant from the fire, and dropping the curtain before it. This expedient will be more necessary after dinner, when the air of the room has been tainted by the steams of the foods; or, as persons in this country sit some hours after dinner, it may be proper to retire immediately after the dishes are removed into another apartment which has been properly ventilated.

Page 49, l. 10, r. dephlogificated.

72, l. 19, after fermentation, r. though even these gelatinous foods often become sour.

82, l. 12, add, in health.

85, Sect. III. l. 2, r. rheumatism, gout, epilepsy.

107, after the second paragraph. The exercise of the shuttle-cock is peculiarly beneficial to such invalids as have sufficient strength to undergo it; as, by the various exertions of the muscles of the limbs and of the trunk of the body, and the alternate compression and relaxation of the blood-vessels and secretory organs, the circulation is promoted, the secretions, especially perspiration, are increased, the relaxed fibres strengthened, and the nervous system invigorated. When the invalid is confined by bad weather, it ought to be made use of frequently every day, as a more salutary mode of warming the body than by the heat of fires.

Page 107, note, l. 3 from the bottom, r. another error is committed.

110, after the first paragraph. Infants and young people ought to be habituated to hard beds, and light covering;

vering; and therefore mattraffes of hair or wool are preferable to feather or down beds, which enervate exceedingly, by increasing the heat of the body, and promoting too profuse a perspiration.

Invalids ought to lie on a mattrafs over a feather-bed; such especially as are subject to feverish heats, or profuse sweats. I recommend this practice so much the more earnestly, as it does not always occur to medical men; and from repeated experience of its good effects, beyond what might have been expected from a regulation apparently so trivial.

Page 121, l. 3, *r.* were verified.

148, note, *r.* Dr. *de Sauvages*.

158, note, line the last, *r.* intrigue.

F I N I S.

[illegible]

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1801. It is a formal address, and it begins with the words "I have the honor to acknowledge the receipt of your letter of the 27th inst. and in reply to inform you that the same has been forwarded to the proper authorities for their consideration."

MVSEVM
BRITAN
NICVM

